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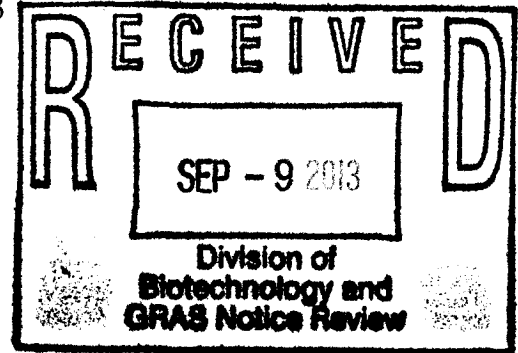
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September 5, 2013

**BY FEDEX**

Paulette Gaynor, Ph.D.  
Office of Food Additive Safety  
Center for Food Safety and Applied Nutrition  
U.S. Food and Drug Administration  
5100 Paint Branch Parkway  
College Park, Maryland 20740-3835



**Subject: GRAS Notice for Fiberstar Inc.'s Citrus Flour Products**

Dear Dr. Gaynor:

Pursuant to the proposed rule outlined at 62 Fed. Reg. 18939 (April 17, 1997), Fiberstar, Inc. (Fiberstar), hereby submits notification that the uses of its Citrus Flour products, e.g., Citri-Fi™100 and Citri-Fi™ Citrus Flour 200 With Guar Gum, as moisture retention agents, flavor enhancing agents, and processing aids in foods, including processed meat and poultry products, are exempt from the premarket approval requirements of the Federal Food, Drug, and Cosmetic Act because Fiberstar has determined that such uses are generally recognized as safe (GRAS). Under the conditions of intended use, Fiberstar's Citrus Flour products may be combined with other permissible food ingredients prior to addition to the finished food.

As you may recall, Fiberstar previously submitted a GRAS Notice for its Citri-Fi™ Citrus Fiber 100 and Citri-Fi™ Citrus Fiber 200 With Guar Gum products, GRN 000154 (2004), in response to which the Agency had no questions. The data and information in GRN 000154 are incorporated by reference in the current notice. The current notice concerns Citrus Flour products that meet the same specifications as the Citrus Fiber products described in GRN000154. Whereas the Citrus Fiber products described in GRN 000154 were produced from orange juice cells, the Citrus Flour products that are the subject of this GRAS notice are produced from juice cells and additional raw materials, i.e., peel, rag or segment membranes, and core of oranges (excluding bitter oranges), lemons, limes and grapefruit. In addition, the intended uses of

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the Citrus Flour products include the additional use as a processing aid. Further, the Citrus Flour products are intended to be used in a wider range of food products.

Fiberstar does not submit new suitability data for the use of Citrus Flour as a moisture retention agent in meat and poultry products with the current GRAS notice, but instead relies on the suitability data for the Citrus Fiber products that it has previously submitted to the United States Department of Agriculture Food Safety Inspection Service (FSIS). In 2004, as part of GRN 000154, Fiberstar submitted suitability data for Citrus Fiber used as a moisture binder in certain ground meat products. In 2009, Fiberstar submitted additional suitability data to FSIS for use of the product as a binder in whole muscle cuts. Enclosed for your files are copies of the reports submitted to FSIS in 2004 and 2009. See Appendices 3 & 4. In addition, we enclose the relevant pages of FSIS Directive 7120.1 evidencing the FSIS determination that Citrus Fiber is suitable for the proposed uses. See FSIS Directive 7120.1, Safe and Suitable Ingredients in the Production of Meat, Poultry, and Egg Products (Aug. 13, 2013).

In a phone conversation on October 11, 2012, our office, on behalf of Fiberstar, discussed the need for new suitability data for use of the Citrus Flour products in meat and poultry with Dr. John M. Hicks, Jr., RIMD, Office of Policy and Program Development, FSIS. We explained that the Citrus Fiber products described in GRN 000154 are produced from juice cells from oranges, whereas the Citrus Flour products that would be the subject of the current GRAS notice are produced from juice cells and additional raw materials, i.e., peel, rag or segment membranes, and core of oranges (excluding bitter oranges), lemons, limes and grapefruit. Notwithstanding the change in citrus source material, the specifications and the physical-chemical characteristics of the Citrus Flour products described in the current GRAS notice are identical to the specifications and physical-chemical characteristics of the Citrus Fiber products in GRN 000154. Dr. Hicks indicated that he did not anticipate that new suitability data would be required, but could not definitively state so until he reviewed the Citrus Flour GRAS notification.<sup>1</sup>

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<sup>1</sup> The intended uses of the Citrus Flour products include use as a processing aid in meat and poultry products. According to FSIS, processing aids are ingredients that are present in a meat or poultry product in an insignificant amount and that have no functional or technical effects in the finished meat or poultry product. See also 21 C.F.R. § 101.100(a)(3). An ingredient is “suitable” as a processing aid when it does not have a technical or functional effect in the meat or poultry product. Suitability as a processing aid is determined by FSIS on a case-by-case basis by considering the proposed use of the substance and the specific meat or poultry product to which it is added.

Office of Food Additive Safety  
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To facilitate your review, this notification is submitted in the format suggested under proposed 21 C.F.R. § 170.36 (c) (see 62 Fed. Reg. at 18961). Four copies of the GRAS Exemption Claim and Additional Information documents, including one for the FSIS, are enclosed. Also enclosed is an electronic copy of the documents.

Sincerely,

(b) (6)

A large black rectangular redaction box covers the signature area, with the text "(b) (6)" in red at the top left corner.

Diane B. McColl  
Counsel to Fiberstar, Inc.

DBM/RVL/sas  
Enclosures

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## **GRAS EXEMPTION CLAIM**

We hereby claim that the use of Fiberstar Inc.'s (Fiberstar's) Citrus Flour Products, e.g., Citri-Fi™ Citrus Flour 100 and Citri-Fi™ Citrus Flour 200 With Guar Gum, as a moisture retention agent, a flavor enhancing agent, and a processing aid in foods are exempt from the premarket approval requirements of the Federal Food, Drug, and Cosmetic Act because we have determined that such uses are generally recognized as safe (GRAS) based on scientific procedures. The Citrus Flour products may be combined with other permissible food ingredients prior to addition to the finished food.

### **(1) Name and address of the notifier**

Dale Lindquist  
President and Chief Executive Officer  
Fiberstar, Inc.  
713 St. Croix Street  
River Falls, Wisconsin 54022

### **(2) Common or usual names of the substance that is the subject of the GRAS exemption claim**

Citrus flour, orange fiber, citrus fiber, Citri-Fi™  
In addition to the Citri-Fi™ brand name, Fiberstar may develop additional trade names for its range of Citrus Flour products, in the future.

### **(3) Product description**

The subject of this GRAS exemption claim, Citrus Flour products, is substantially similar to the Citrus Fiber products that were the subject of the GRAS exemption claim, GRN 000154, in response to which the Agency raised no questions. Fiberstar has expanded the raw material source used for the production of the Citrus Flour from orange juice cells to the peel, rag or segment membranes, and core of oranges (excluding bitter oranges), lemons, limes, and grapefruit. Citrus Flour consists of juice cells (also known as "pulp cells," "juice vesicles" or "pulp"), peel, rag or segment membranes, and core from oranges (including mandarin oranges and tangerines but excluding bitter oranges), lemons, limes, and grapefruit that have been dried, mechanically sheared and ground. Citrus Flour may be combined with other permissible food ingredients, e.g., guar gum, prior to addition to the finished food.



**(4) Applicable conditions of use of the notified substance****(a) Foods in which the substance is to be used**

Citrus Flour products are intended for use in baked goods, pastas, salad dressings, confectionery, processed cheese spreads, non-carbonated beverages and juice drinks, and frozen food entrees, such as frozen doughs, frozen meat products, frozen baked goods, frozen desserts, and frozen dairy products. The products are also intended for use in processed meat and poultry products, such as hamburger patty mixes, and in seasoning brines and solutions for meat and poultry products, such as chicken breasts, ribs, pork tenderloins, turkey breasts and beef tips. In some instances, the Citrus Flour product may be combined with other permissible food ingredients prior to addition to the finished food.

**(b) Levels of use in such foods**

The use levels of Citrus Flour products, such as Citri-Fi™ 100 Citrus Flour and Citri-Fi™ 200 Citrus Flour With Guar Gum per both the GRN 000154 notified uses and the proposed uses are:

<b>Technical Function and Maximum Proposed Use Level</b>	<b>Food Types</b>
Moisture retention 5%	Baked goods, pastas, salad dressings, confectionery, processed cheese spreads, and frozen food entrees*
Flavor enhancing 2%	Non-carbonated beverages, fruit drinks
Moisture retention and in seasoning brine and solutions 3%	Processed meat and poultry products
Processing aid 1%	Salads, sauces, meats, fillings, dips, bakery, dairy, fruit- and vegetable-based products, and pizza products*

\* To facilitate blending, the Citrus Flour products may be mixed with egg products intended for use in certain of these food types, e.g., baked goods, in amounts that result in no more than the maximum proposed levels identified. Citrus Flour products will be added only to those egg products that are destined for use in the identified food types. Therefore, the calculation of the estimated daily intake does not include egg products as a separate food type.

**(c) Purposes for which the substance is used**

Moisture retention agent, flavor enhancing agent, and processing aid.

**(d) Description of the population expected to consume the substance**

Members of the general population who consume at least one of the food categories described above.

**(5) Basis for the GRAS determination**

The basis of the GRAS determination for Fiberstar's Citrus Flour Products, e.g., Citri-Fi™ 100 Citrus Flour and Citri-Fi™ 200 Citrus Flour With Guar Gum, is through scientific procedures.

**(6) Review and Copying Statement**

The data and information that are the basis for Fiberstar's GRAS determination are available for the Food and Drug Administration's (FDA's) review and copying at reasonable times at the offices of the notifier, or will be sent to FDA upon request.

(b) (6)

Dale Lindquist  
President and Chief Executive Officer  
Fiberstar, Inc.

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Diane B. McColl  
Hyman, Phelps and McNamara, P.C.  
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Washington, D.C. 20005  
Phone: 202-737-4291

## **ADDITIONAL INFORMATION**

### **(1) Identity of the notified substance**

#### **(a) Common or usual name**

Citrus flour, orange fiber, citrus fiber, Citri-Fi™.

In addition to the Citri-Fi™ brand name, Fiberstar may develop additional trade names for its range of Citrus Flour products, in the future.

#### **(b) Product description**

Fiberstar's Citrus Flour products are substantially similar to the Fiberstar's Citrus Fiber products that were the subject of the GRAS exemption claim, GRN 000154, in response to which the Agency raised no questions. Fiberstar has expanded the raw material source used for the production of the Citrus Flour to include additional parts of the orange, namely peel, rag or segment membranes, and core, and additional citrus fruits, including lemons, limes, and grapefruit. Citrus Flour consists of juice cells (also known as "pulp cells," "juice vesicles" or "pulp"), peel, rag or segment membranes, and core from oranges (including mandarin oranges and tangerines but excluding bitter oranges), lemons, limes and grapefruit that have been dried, mechanically sheared and ground. Citrus Flour products may be combined with other permissible food ingredients, e.g., guar gum, prior to addition to the finished food.

#### **(c) Method of manufacture**

The manufacture of Citrus Flour is substantially similar to the manufacture of Citrus Fiber which was the subject of GRN 000154, submitted in 2004.

The manufacture begins at the juice processing operation where citrus fruit is squeezed to separate the peel, rag or segment membranes, core, and pulp cells. This fibrous material is separated from the juice and washed to remove the sugars and oils. From the juicing operation, the material is transferred and can be immediately processed to produce the finished product or dried so that it can be stored and processed at a later time. At the fiber processing operation, the material is pumped or conveyed into a tank, re-hydrated with water (if starting with dried material), sheared, stabilized with heat, and dried. The drying system reduces the moisture content down to approximately 2-15% moisture so that it is shelf stable under ambient conditions. From the dryer, the product is collected in a surge hopper where it is stored until it is ground. The product is ground in a mill and conveyed to storage silos where it is held until packaging. Prior to shipment, the product is conveyed from the silos through a screening operation to remove larger particles, to a collection hopper where it drops through a magnet and metal detector and then packaged

into a bag, bag in box, or large tote bag. Other permissible food ingredient, e.g., guar gum, are added either before or after drying.

**(d) Characteristic properties**

The product is a yellowish light and fluffy powder. The specifications for the Citrus Flour products are listed in (f) below

**(e) Any content of potential human toxicants**

None.

**(f) Specifications for Citri-Fi™ Citrus Flour products**

Specifications of the Citrus Flour products are presented below.

**Citri-Fi ® Specifications (processed rag/core or processed citrus peel)]**

<u>Microbial Analysis</u>	<u>Range</u>	<u>Method</u>
<i>E.coli</i> (per g)	<10 CFU	AOAC 991.14
<i>Salmonella</i> /25 g	Negative	Conforms to FDA/BAM manual
Percent Moisture	<10%	AOAC 926.08
Particle Size*		
Passing through 30 mesh	>90%	Jet sieve
*particle size will vary depending on grinding/screening method and customer requirements		
Water holding capacity (g water/g dry material)	4-10.5	AACC Standard 56-30
USP Heavy Metals (as Pb)	<0.5 mg/kg (ppm)	

**COMPOSITIONAL ANALYSES**

The Citrus Flour products will have the same composition as the Citrus Fiber products that were GRAS notified in 2004.

**Citri-Fi™ 100 Citrus Flour (Typical Technical Composition)**

Granulation	10 to <200 mesh
pH	5.5-7.5
Fat, Acid Hydrolysis	1.04%
Carbohydrates, Total	82.2%
Fiber, Total Dietary	73.4%
Soluble fiber	36.0%
Insoluble fiber	37.4%
Protein by Dumas (F=6.25)	7.47%
Moisture/Vacuum Oven (70C/16hr)	6.84%
Ash Analysis	2.44%

**Citri-Fi™ 200 Citrus Flour With Guar Gum\* (Typical Technical Composition)**

Granulation	10 to <200 mesh
pH	5.5-7.5
Fat, Acid Hydrolysis	1.23%
Carbohydrates, Total	81.9%
Fiber, Total Dietary	74.8%
Soluble fiber	37.9%
Insoluble fiber	36.9%
Protein by Dumas (F=6.25)	7.86%
Moisture/Vacuum Oven(70C/16hr)	6.72%
Ash Analysis	2.30%

\* Citri-Fi™200 contains guar gum at levels up to 33%.

**(2) Information on any self-limiting levels of use**

While the high water-retention capacity of the Citrus Flour products results in benefits to food products, it also has a self-limiting effect on the amount of Citrus Flour that can be added to a food without producing a loss of desirable eating qualities.

**(3) Probable Consumption of Citrus Flour**

Fiberstar's Citrus Flour products will be used in foods at levels up to 5%. Use levels in processed meat and poultry products will range from 0.1% to 3%.

Specifically, the uses are:

Technical Function and Maximum Proposed Use Level	Food Types	GRN000154 or proposed use
Moisture retention 5%	Baked goods, pastas, salad dressings, confectionery, processed cheese spreads, and frozen food entrees**	GRN000154
Flavor enhancing 2%	Non-carbonated beverages, fruit drinks	GRN000154
Moisture retention and in seasoning brine and solutions 3%	Processed meat and poultry products	GRN000154
Processing aid 1%	Salads, sauces, meats, fillings, dips, bakery, dairy, fruit- and vegetable-based products, and pizza products**	Proposed use

\*\* To facilitate blending, the Citrus Flour products may be mixed with egg products intended for use in certain of these food types, e.g., baked goods, in amounts that result in no more than maximum proposed levels identified. Citrus Flour products will be added only to those egg products that are destined for use in any of the identified food types. Therefore, the calculation of the estimated daily intake does not include egg products as a separate food type.

Using the National Health and Examination Survey conducted in 2003-2004, 2005-2006, and 2007-2008 (NHANES 2003-2008), the estimated daily intake of Citrus Flour due to the GRN000154 and FSIS authorized uses, and the proposed intended uses was calculated to be 23.4 g/day (0.4 g/kg bw/day) at the mean and 39.5 g/day (0.8 g/kg bw/day) at the 90<sup>th</sup> percentile. See Appendix 2.

#### **(4) Use in meat, poultry and egg products**

In accordance with the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act, the Food Safety Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA) is responsible for determining the efficacy and suitability of food ingredients intended for use in meat, poultry and egg products.

FSIS previously determined that Fiberstar's Citrus Fiber products are suitable for certain uses in meat and poultry products. In 2004, as part of GRN 000154, Fiberstar submitted suitability data for Citrus Fiber used as a moisture binder in certain ground meat products. In 2009, Fiberstar submitted additional suitability data to FSIS for use of the product as a binder in whole muscle cuts. See Appendices 3 & 4; see also FSIS Directive Safe and Suitable Ingredients in the Production of Meat, Poultry, and Egg Products (Aug. 13, 2013).

The specifications and physical chemical characteristics of Fiberstar's Citrus Flour products are identical to the specifications and physical chemical characteristics of the Citrus Fiber products that FSIS determined to be suitable for the listed uses. Therefore, the expansion of raw material sources will not affect the suitability of Citrus Flour in meat and poultry products.

The intended uses of Citrus Flour include use as a processing aid in meat and poultry products. According to FSIS, processing aids are ingredients that are present in a meat or poultry product in an insignificant amount and that have no functional or technical effects in the finished meat or poultry product. See also 21 C.F.R. § 101.100(a)(3). An ingredient is "suitable" as processing aid, when it does not have a technical or functional effect in the meat or poultry product. Suitability as a processing aid is determined by FSIS on a case-by-case basis by considering the proposed use of the substance and the specific meat or poultry product to which it is added.

The intended uses of Citrus Flour also include the use in liquid, frozen, and dried whole egg products destined for use in egg containing products such as baked goods. The effect of the addition of Citrus Flour to egg products on binding and stabilizing benefits, especially as an agent to assist with whipping was investigated. See Appendix 5.

**(5) Detailed summary of the basis for the notifier's determination that a particular use of the notified substance is exempt from the premarket approval requirements of the Federal Food, Drug, and Cosmetic Act because such use is GRAS.**

The only processing aid used in the production of Fiberstar's Citrus Flour is water, and the final product meets appropriate food grade specifications. The guar gum ingredient meets applicable Food Chemicals Codex specifications and is affirmed as GRAS by FDA for use in numerous foods at levels up to 2% in the finished food (See 21 C.F.R. § 184.1339). The amount of guar gum in foods resulting from addition of the Citrus Flour product would be comparable to that affirmed as GRAS by FDA. A thorough review of the publicly available scientific literature revealed no evidence of any adverse

effects associated with Citrus Flour. In addition, an independent scientific expert qualified by training and relevant national and international experience to evaluate the GRAS status of food and food ingredients, critically evaluated the available pertinent data and information and concluded that other qualified experts would agree that, under the conditions of intended use, Fiberstar's Citrus Flour is GRAS through scientific procedures. See Appendix 1, Report on the "Generally Recognized as Safe" (GRAS) Status of citrus fiber (citrus flour) under conditions of intended use in certain foods (March 19, 2013).

A thorough review of the publicly available scientific literature failed to reveal evidence of any adverse effects associated with consumption of citrus flour. The only published papers on potential effects of citrus flour were those relating to chemoprevention of colon tumors in rats and mice [*e.g.*, Reddy *et al.* (1981)]. Reddy *et al.* (1981) reported no adverse effects of 15% citrus pulp (termed citrus fiber by the authors) administered for 27 weeks in the diet of F344 rats used as controls. The daily intake of citrus fiber was approximately 2.4 g/day or approximately 8 g/kg bw/day assuming a F344 rat weighs 300 g based on feed intake measurements taken during week 10.

The total flavonoid (as hesperidin) intake from the highest estimated intake (90<sup>th</sup> percentile, *per user*) of the proposed food uses of Citrus Flour products is 12.9 mg/kg bw/day for a 70 kg individual. Flavonoids are widely present in foods. The most prominent flavanones found in citrus fruits are hesperetin, naringenin, and eriodictyol (Beecher, 2003). Citrus Flour products may contain flavonoids, typically flavanones, depending on the citrus source. For example, oranges and grapefruit contain hesperetin and naringenin and lemons contain eriodictyol, and hesperetin (Somerset and Johnnot, 2008). The flavonoids were identified as their aglycone. Kefford (1960) reported that oranges contain hesperidin/hesperetin, eriodictin/eriodictyol, neohesperidin, naringin/naringenin, and rhoifolin/apigenin; grapefruit contains naringin; lemons contain hesperidin, eriodictin, diosmin/diosmetin, limocitrin, and cirtonin; and limes possibly contain hesperidin.

The extensive body of published literature relating to overall flavonoid consumption and health risks indicates that health risks decrease with diets higher in flavonoid content (Knekt *et al.*, 2002; Neuhauser, 2004). For example, Knekt *et al.* (2002) examined total dietary intakes of 10,054 Finnish subjects with chronic diseases (*e.g.*, heart disease, cerebrovascular disease, lung cancer, asthma, and type II diabetes). They estimated flavonoid intake based on flavonoid concentrations in Finnish foods and reported that diets higher in flavonoids such as quercetin, naringenin, or hesperetin significantly reduced the risk for some of the chronic diseases examined.



One flavonoid, quercetin, has a more comprehensive safety database.

A comprehensive review of quercetin provided detailed documentation of the safety of quercetin at anticipated dietary intakes (Harwood *et al.*, 2007). The discussion of quercetin metabolism (first-pass effect with >90% of orally administered dose metabolized), protective mechanisms to limit pro-oxidant effects of unchanged quercetin, low bioavailability of quercetin, results of human clinical studies, and results of long-term animal studies support the conclusion that quercetin is not anticipated to produce adverse effects in humans. Moreover, in 2010, FDA raised no questions to GRN000341, a GRAS notice for quercetin for use as an ingredient in beverages and beverage bases, grain products and pastas, processed fruits and fruit juices, and soft candies at levels up to 500 milligrams per serving, with an estimated daily intake value of 20.8 mg/kg bw/day. FDA (2010). The estimated 90<sup>th</sup> percentile intake of quercetin due to Citri-Fi™ Citrus Flour consumption is 0.14 mg/kg bw/day, i.e., well below the level that was determined GRAS (in GRN000341) with no questions from FDA.

Thus, as evidenced in the enclosed, independent qualified scientific experts would agree that, under the conditions of intended use, Citrus Flour products with or without permissible food ingredients such as guar gum are GRAS based on scientific procedures. See Appendix 1, Report on the “Generally Recognized as Safe” (GRAS) Status of citrus fiber (citrus flour) under conditions of intended use in certain foods (March 19, 2013).

## **(6) References**

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**Report on the “Generally Recognized as Safe” (GRAS) status of  
citrus fiber (citrus flour)  
under conditions of intended use in certain foods**

March 19, 2013

## **INTRODUCTION**

In 2004, Fiberstar Inc. provided the US FDA with a GRAS Notice (GRN 154) for proposed uses of Citri-Fi™ Citrus Fiber products (*i.e.*, Citri-Fi™ 100 and Citri-Fi™ 200 Citrus Fiber). The raw materials in these Citrus Fiber products are being expanded from the juice cells (also known as pulp cells, juice vesicles or pulp) from oranges to the juice cells, peels, rags or segment membranes, and cores of oranges (excluding bitter oranges), lemons, limes, and grapefruit. Additionally, the proposed uses of these Citrus Fiber products have been expanded to include some additional product categories. Since the 2004 GRAS Notice, the term “Citrus Fiber” was replaced with “Citrus Flour” and hereafter the term “Citrus Flour” will be used.

## **HISTORICAL USE AND CONSUMPTION OF CITRUS FRUITS**

The raw materials used to manufacture Citrus Flour products are being expanded to include the peel, rag, core, and pulp of oranges, lemons, limes, and grapefruit. Oranges, lemons, limes and grapefruit have a long history of safe human consumption. McCready and Owens (1954) describe writings dating back to 2200 BC involving baskets of citrus fruits and the introduction of oranges to North America in the late 15<sup>th</sup> century. Citrus peel has been used in food products (*e.g.*, jams, jellies, dry beverage powders, low-calorie foods, salad dressings, and yogurt) for years because of its pectin content and water-binding properties (Braddock, 1983; Nelson, 1979).

In 2007, the annual *per capita* consumption in the US of oranges and tangelos, tangerines and tangelos, lemons, limes, and grapefruit was 7.44, 2.55, 2.80, 2.38, and 2.83 pounds, respectively (USDA, 2008). In 2007/2008, the annual *per capita* consumption of orange juice and grapefruit juice was 3.81 and 0.36 gallons, respectively (USDA, 2008).

## **PRODUCT IDENTIFICATION**

Citrus Flour products consist of juice cells (also known as pulp cells, juice vesicles or pulp), peel, rag or segment membranes, and core from all types of oranges (including mandarin oranges and tangerines but excluding bitter oranges), and from lemons, limes, and grapefruit that have been dried, mechanically sheared and ground.

## MANUFACTURING

The manufacture of Citrus flour begins at the juice processing operation where citrus fruit is squeezed to separate the peel, rag or segment membranes, core, and pulp cells. This fibrous material is separated from the juice and washed to remove the sugars and oils. From the juicing operation, the material is transferred and can be immediately processed to produce the finished product or dried so that it can be stored and processed at a later time. At the fiber processing operation, the material is pumped or conveyed into a tank, re-hydrated with water (if starting with dried material), sheared, stabilized with heat, and dried. The drying system reduces the moisture content down to approximately 2-15% moisture so that it is shelf stable under ambient conditions. From the dryer the product is collected in a surge hopper where it is stored until it is ground. The product is ground in a mill and conveyed to storage silos where it is held until packaging. Prior to shipment, the product is conveyed from the silos through a screening operation to remove larger particles, to a collection hopper where it drops through a magnet and metal detector and then packaged into a bag, bag in box, or large tote bag.

## MICROBIOLOGICAL AND LEAD SPECIFICATIONS

Specifications of the Citrus Flour products are presented below.

### Citri-Fi ® Specifications (processed rag/core or processed citrus peel)

<u>Microbial Analysis</u>	<u>Range</u>	<u>Method</u>
<i>E.coli</i> (per g)	<10 CFU	AOAC 991.14
<i>Salmonella</i> /25 g	Negative	Conforms to FDA/BAM manual
Percent Moisture	<10%	AOAC 926.08
Particle Size*		
Passing through 30 mesh	>90%	Jet sieve
*particle size will vary depending on grinding/screening method and customer requirements		
Water holding capacity (g water/g dry material)	4-10.5	AACC Standard 56-30
USP Heavy Metals (as Pb)	<0.5 mg/kg (ppm)	

Certificates of analysis confirming the heavy metal (as Pb), microbial analysis, percent moisture, particle size, and water-holding capacity are provided in Attachment 1.

## COMPOSITIONAL ANALYSES

The Citrus Flour products will have the same composition as the Citrus Fiber products previously evaluated in 2004 (Citri-Fi™ 100 Citrus Fiber and Citri-Fi™ 200 Citrus Fiber With Guar Gum).

### **Citri-Fi™ 100 Citrus Flour (Typical Technical Composition)**

Granulation	10 to <200 mesh
pH	5.5-7.5
Fat, Acid Hydrolysis	1.04%
Carbohydrates, Total	82.2%
Fiber, Total Dietary	73.4%
Soluble fiber	36.0%
Insoluble fiber	37.4%
Protein by Dumas (F=6.25)	7.47%
Moisture/Vacuum Oven (70C/16hr)	6.84%
Ash Analysis	2.44%

### **Citri-Fi™ 200 Citrus Flour With Guar Gum (Typical Technical Composition)**

Granulation	10 to <200 mesh
pH	5.5-7.5
Fat, Acid Hydrolysis	1.23%
Carbohydrates, Total	81.9%
Fiber, Total Dietary	74.8%
Soluble fiber	37.9%
Insoluble fiber	36.9%
Protein by Dumas (F=6.25)	7.86%
Moisture/Vacuum Oven(70C/16hr)	6.72%
Ash Analysis	2.30%

### **STABILITY**

Citrus Flour products are stable under ambient conditions for up to 36 months (see Attachment 2).

## **INTENDED USES**

### **Purpose**

The Citrus Flour products derived from peel, rag, core, and pulp from all types of oranges (including mandarin oranges and tangerines but excluding bitter oranges), and from lemons, limes and grapefruit is proposed to be used as a moisture retention agent, a processing aid, and a flavor enhancing agent.

### **Food Uses**

The intended uses for Citri-Fi™ 100 Citrus Flour and Citri-Fi™ 200 Citrus Flour With Guar Gum products are being expanded and include baked goods, pastas, salad dressings, confectionery, processed cheese spreads, non-carbonated beverages and juice drinks, and frozen food entrées, such as frozen doughs, frozen meat products, frozen baked goods, frozen desserts, and frozen dairy products. The products are also intended for use in processed meat and poultry products, such as hamburger patty mixes, and in seasoning brines and solutions for meat and poultry products, such as chicken breasts, ribs, pork tenderloins, turkey breasts and beef tips.

### **Levels of Use**

Citri-Fi™ 100 Citrus Flour and Citri-Fi™ 200 Citrus Flour With Guar Gum will be used in foods at levels not to exceed 5%. Use levels in processed meat and poultry products would range from 0.1% to 3%.

The maximum proposed use level for moisture retention in baked goods, pastas, salad dressings, confectionery, processed cheese spreads, and frozen food entrées is 5%; for flavor enhancing in non-carbonated beverages and fruit drinks is 2%; for moisture retention and in seasoning brine and solutions in processed meat and poultry products is 3%; as a processing aid in salads, sauces, meats, fillings, dips, bakery, dairy, fruit- and vegetable-based products, and pizza products is 1%.

## **ESTIMATED EXPOSURE**

The 2-day average intake of Citrus Flour was estimated by Exponent (2012) for the US population 2+ years using the National Health and Examination Survey conducted in 2003-2004, 2005-2006, and 2007-2008 (NHANES 2003-2008). The background intake and intake from proposed food uses of Citrus Flour were also estimated by Exponent (2012).

The estimated daily intakes of Citrus Flour were calculated as the mean and 90<sup>th</sup> percentile on a *per capita* and *per user* basis and in units of g/day and g/kg bw/day. The results are summarized in Table 1.

**Table 1: Estimated daily intakes of Citrus Flour (mean and 90<sup>th</sup> percentile on a *per capita* and *per user* basis)**

Citrus Flour	Per Capita		Per User	
	Mean	90 <sup>th</sup> Percentile	Mean	90 <sup>th</sup> Percentile
<i>Background</i>				
g/day	0.4	1.1	0.7	1.6
g/kg bw/day	0.01	0.02	0.01	0.03
<i>Total combined proposed food uses</i>				
g/day	23.3	39.5	23.4	39.5
g/kg bw/day	0.4	0.8	0.4	0.8
<i>Cumulative (proposed food uses + background)</i>				
g/day	23.7	39.9	23.7	39.9
g/kg bw/day	0.4	0.8	0.4	0.8

## SAFETY

### Safety Evaluation

The proposed uses of Citri-Fi<sup>TM</sup> 100 Citrus Flour (formerly known as Citri-Fi<sup>TM</sup> 100 Citrus Fiber) were determined to be GRAS based on scientific procedures and on common use in food prior to 1958 (Fiberstar, 2004). The proposed uses of Citri-Fi<sup>TM</sup> 200 Citrus Flour with Guar Gum (formerly known as Citri-Fi<sup>TM</sup> 200 Citrus Fiber with Guar Gum) were determined to be GRAS based on scientific procedures and on common use in food prior to 1958 (Fiberstar, 2004).

The only processing aid used in the production of Citrus Flour products is water. The final product meets appropriate food grade specifications. The guar gum ingredient meets applicable Food Chemicals Codex specifications and is affirmed as GRAS by FDA for use in numerous foods at levels up to 2% in the finished food (See 21 C.F.R §184.1339). The amount of guar gum in foods resulting from addition of the Citrus Flour product would be comparable to that affirmed as GRAS by FDA.

A thorough review of the publicly available scientific literature failed to reveal evidence of any adverse effects associated with consumption of citrus flour. The only published papers on potential effects of citrus flour were those relating to chemoprevention of colon tumors in rats and mice [e.g., Reddy and Mori (1981)]. Reddy and Mori (1981) reported no adverse effects of 15% citrus pulp (termed citrus fiber by the authors) administered for 27 weeks in the diet of F344 rats used as controls. The daily intake of citrus fiber was approximately 2.4 g/day or approximately 8 g/kg bw/day assuming a F344 rat weighs 300 g based on feed intake measurements taken during week 10.



Allergenicity. Citrus Flour products are not “likely to pose any allergenic risk even to the few citrus-allergic consumers in the population” (Expert opinion of Dr. Steven Taylor; cf Attachment 3).

Flavonoids are widely present in foods. The most prominent flavanones found in citrus fruits are hesperetin, naringenin, and eriodictyol (Beecher, 2003). Citrus Flour products may contain flavonoids, typically flavanones, depending on the citrus source. For example, oranges and grapefruit contain hesperetin and naringenin and lemons contain eriodictyol, and hesperetin (Somerset and Johnnot, 2008). The flavonoids were identified as their aglycone. Kefford (1960) reported that oranges contain hesperidin/hesperetin, eriodictin/eriodictyol, neohesperidin, naringin/naringenin, and rhoifolin/apigenin, grapefruit contains naringin, lemons contains hesperidin, eriodictin, diosmin/diosmetin, limocitrin, and cirtonin, and limes possibly contain hesperidin. Mean daily intakes of these flavanones from these fruits consumed in an Australian adult population are summarized in Table 2. Beecher (2003) reviewed the consumption of flavonoids in a variety of countries citing total flavonoid intakes for Denmark, Finland, Holland, Japan, and the US of 23-46, 24, 73, 63, and 20-34 mg/day. The differences in values are likely a reflection of cultural dietary habits and incompleteness of the originating database.

**Table 2: Mean Daily Intake (mg) of Flavonoids from Citrus Fruits (% of Total Intake of Each Flavonoid)**

	Hesperetin	Naringenin	Eriodictyol
Orange	4.12 (98.1)	1.4 (67.0)	<0.001 <sup>a</sup>
Grapefruit	0.02	0.69 (33.0)	<0.001 <sup>a</sup>
Lemon	0.03	<0.001 <sup>a</sup>	0.02 (4.4)

Somerset and Johnnot, 2008

<sup>a</sup>detection limit

The total flavonoid (as hesperidin) intake from the highest estimated intake (90<sup>th</sup> percentile, *per user*) of proposed food uses is 39.5 g/day X 22.82 mg flavonoid/g Citrus Flour (see certificate of analysis, Attachment 4) = 901.4 mg/day or 12.9 mg/kg bw/day for a 70 kg individual.

There is an extensive body of published literature relating to overall flavonoid consumption and health risks. It may be concluded from a critical evaluation of this information that health risks decrease with diets higher in flavonoid content (Knekt *et al.*, 2002; Neuhauser, 2004). For example, Knekt *et al.* (2002) examined total dietary intakes of 10,054 Finnish subjects with chronic diseases (*e.g.*, heart disease, cerebrovascular disease, lung cancer, asthma, and type II diabetes). They estimated flavonoid intake based on flavonoid concentrations in Finnish foods and reported that diets higher in flavonoids such as quercetin, naringenin, or hesperetin significantly reduced the risk for some of the chronic diseases examined.

Most of the published studies on the individual flavonoids identified in citrus fruits are focused on pharmacokinetics and metabolism. Standard toxicological studies, with the exception of some mutagenicity/genotoxicity studies on some specific flavonoids, were not identified.

One flavonoid, quercetin, has a more comprehensive safety database including reproductive toxicity and carcinogenicity studies including an evaluation by the National Toxicology Program (NTP, 1992). In the reproductive toxicity studies, quercetin showed no effect on mean viable litter size, live birth index, 3-day survival of pups, lactation index, pup birth weight, or pup weight at 21 days in F344 rats fed 0.1 or 0.2% quercetin in the diet (approximately 25 or 52 mg quercetin/kg bw/day) from birth to 12 or 13 weeks at which time they were mated (Stoewsand *et al.*, 1984). Quercetin was not fed during gestation or lactation. When administered at doses of 20-2000 mg/kg bw/day to Sprague-Dawley rats during gestation days 6-15, there were no reported fetal abnormalities or overt signs of toxicity with the exception of decreased mean fetal weight at the highest dose (Willhite, 1982). It may be concluded that quercetin is neither a reproductive nor a developmental toxicant.

Potential carcinogenicity was evaluated in feeding studies (up to 10% in the diet) and in dermal initiation studies in rats, mice, and/or hamsters. These studies were summarized and critically evaluated by NTP (1992). The one positive report was a study by Pamukcu *et al.* (1980) in which intestinal (20/25 rats) and urinary bladder (5/25 rats) neoplasms (*i.e.*, intestinal adenoma, fibroadenoma, and adenocarcinoma, and transitional cell carcinoma with and without fibromyxoma of the urinary bladder) were reported after week 52 in male and female albino rats (derived from a Norwegian strain) fed 0.1% quercetin in the diet [equivalent to approximately 50 mg quercetin/kg bw/day using the PAFA (1993) database] for 58 weeks. These findings were not duplicated in a 2-year study with F344/DuCrj rats fed 0, 1.25, or 5.0% quercetin (equivalent to 427 or 1926 mg quercetin/kg bw/day for males and 497 or 2372 mg quercetin/kg bw/day for females, respectively) in the diet (Ito *et al.*, 1989). To further explore the findings in these earlier studies, the NTP (1992) conducted a study in which male and female F344/N rats were fed, 0, 1000, 10,000, or 40,000 ppm quercetin in the diet (equivalent to 0, 40, 400, or 1900 mg quercetin/kg bw/day) for 2 years. Survival and feed consumption of treated animals were similar to controls. Body weights of the high-dose group (both sexes) were about 87% that of controls. There were no reported renal effects in female rats. In male rats, there was a dose-related increase in the severity of chronic nephropathy (2.7, 2.7, 3.0, and 3.2 for control, low-, mid-, and high-dose groups, respectively), a slight increased incidence in focal hyperplasia of the renal tubule epithelium (1/50, 2/50, 3/50, and 4/50 rats for control, low-, mid-, and high-dose groups, respectively), additional renal hyperplasia (2/50, 2/50, 6/50, and 8/50 rats for control, low-, mid-, and high-dose groups, respectively), and renal tubule adenomas (1/50, 2/50, 7/50, and 6/50 for control, low-, mid-, and high-dose groups, respectively). Female rats showed a statistically significant, dose-related decrease in the incidence of mammary gland fibroadenomas (29/50, 27/50, 16/50, and 9/50 rats for control, low-, mid-, and high-dose groups, respectively). NTP concluded that there "was some evidence of carcinogenic activity" in male rats based on

an increased incidence of renal tubule cell adenomas, but “no evidence of carcinogenic activity” in female rats.

A comprehensive review of quercetin provided detailed documentation of the safety of quercetin at anticipated dietary intakes (Harwood *et al.*, 2007). The discussion of quercetin metabolism (first-pass effect with >90% of orally administered dose metabolized), protective mechanisms to limit pro-oxidant effects of unchanged quercetin, low bioavailability of quercetin, results of human clinical studies, and results of long-term animal studies further support the conclusion that quercetin is not anticipated to produce adverse effects in humans. In 2010, FDA raised no questions to a GRAS notice for quercetin for use as an ingredient in beverages and beverage bases, grain products and pastas, processed fruits and fruit juices, and soft candies at levels up to 500 milligrams per serving, with an estimated daily intake value of 20.8 mg/kg bw/day.

Quercetin occurs in Citrus Flour products at levels of 0.11-0.24 mg/g (see certificates of analysis, Attachment 5). The estimated 90<sup>th</sup> percentile intake per user of quercetin from proposed food uses is 39.5 g/day X 0.24 mg quercetin/g Citrus Flour = 9.5 mg/day or 0.14 mg/kg bw/day for a 70 kg individual. This level is well below the estimated daily intake (EDI) value of 20.8 mg/kg bw/day for the high-end consumer that has been previously determined to be GRAS with no questions from the FDA (FDA, 2010).

## GRAS Determination

Based on my critical evaluation of the available data and information pertinent to safety, I conclude that the intended uses in foods of Fiberstar's Citrus Flour are GRAS based on scientific procedures corroborated by a history of common use in food prior to 1958.

I further conclude that the intended uses in foods of Fiberstar's Citrus Flour with guar gum combination products are GRAS based on scientific procedures corroborated by a history of common use in food prior to 1958.

It is my opinion that other experts, qualified by training and/or experience to evaluate the safety of substances added to food, would concur with these conclusions.

(b) (6)

*19 March 2013*

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**ATTACHMENT 1**

**Certificates of Analysis**



## Certificate of Analysis (Processed Citrus Peel)

**PRODUCT:** Citri-Fi

**CONTENTS:** CITRUS FLOUR (Processed Citrus Rag/Core)

(b) (4)

DATE OF MANUFACTURE: 08/30/2012  
 DATE OF PACKAGING: 08/30/2012  
 EXPIRATION DATE: 08/30/2015

MICROBIAL ANALYSIS		METHOD
E.Coli (per g)	<10 CFU	AOAC 991.14
Salmonella/25g	Negative	Methods conform to the FDA/BAM manual.
PERCENT MOISTURE		
	7.8%	AOAC 926.08
PARTICLE SIZE		
passing through 30 mesh	92.0%	Jet-seive
WATER HOLDING CAPACITY (AACC Standard Method 56-30)		
WHC	4.77	g water / g dry material





## Certificate of Analysis (Processed Citrus Peel)

**PRODUCT:** Citri-Fi

**CONTENTS:** CITRUS FLOUR (Processed Citrus Peel)

(b) (4)

**DATE OF MANUFACTURE:** 09/05/2012  
**DATE OF PACKAGING:** 09/05/2012  
**EXPIRATION DATE:** 09/05/2015

MICROBIAL ANALYSIS		METHOD
E.Coli (per g)	<10 CFU	AOAC 991.14
Salmonella/25g	Negative	Methods conform to the FDA/BAM manual.

**PERCENT MOISTURE** 7.7% AOAC 926.08

**PARTICLE SIZE**  
passing through 30 mesh 95.0% Jet-seive

**WATER HOLDING CAPACITY (AACC Standard Method 56-30)**  
WHC 4.36 g water / g dry material

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## Certificate of Analysis (Processed Citrus Peel)

**PRODUCT:** Citri-Fi

**CONTENTS:** CITRUS FLOUR (Processed Orange Peel)

(b) (4)

**DATE OF MANUFACTURE:** 09/05/2012  
**DATE OF PACKAGING:** 09/05/2012  
**EXPIRATION DATE:** 09/05/2015

MICROBIAL ANALYSIS		METHOD
E.Coli (per g)	<10 CFU	AOAC 991.14
Salmonella/25g	Negative	Methods conform to the FDA/BAM manual.

**PERCENT MOISTURE** 7.9% AOAC 926.08

**PARTICLE SIZE**  
passing through 30 mesh 92.0% Jet-seive

**WATER HOLDING CAPACITY (AACC Standard Method 56-30)**  
**WHC** 4.75 g water / g dry material

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## Certificate of Analysis (Processed Rag/Core)

**PRODUCT:** Citri-Fi

**CONTENTS:** CITRUS FLOUR (Processed Citrus Rag/Core)

(b) (4)

DATE OF MANUFACTURE: 12/18/2012  
 DATE OF PACKAGING: 12/18/2012  
 EXPIRATION DATE: 12/18/2015

MICROBIAL ANALYSIS		METHOD
E.Coli (per g)	<10 CFU	AOAC 991.14
Salmonella/25g	Negative	Methods conform to the FDA/BAM manual.
PERCENT MOISTURE		5.8% AOAC 926.08
PARTICLE SIZE		
passing through 30 mesh	99.0%	Jet-seive
WATER HOLDING CAPACITY (AACC Standard Method 56-30)		
WHC	8.55	g water / g dry material

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## Certificate of Analysis (Processed Rag/Core)

**PRODUCT:** Citri-Fi

**CONTENTS:** CITRUS FLOUR (Processed Citrus Rag/Core)

(b) (4)

DATE OF MANUFACTURE:	12/12/2012
DATE OF PACKAGING:	12/12/2012
EXPIRATION DATE:	12/12/2015

MICROBIAL ANALYSIS		METHOD
E.Coli (per g)	<10 CFU	AOAC 991.14
Salmonella/25g	Negative	Methods conform to the FDA/BAM manual.

PERCENT MOISTURE	6.3%	AOAC 926.08
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PARTICLE SIZE		
passing through 30 mesh	99.0%	Jet-seive

WATER HOLDING CAPACITY (AACC Standard Method 56-30)		
WHC	8.45	g water / g dry material

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## Certificate of Analysis (Processed Rag/Core)

**PRODUCT:** Citri-Fi

**CONTENTS:** CITRUS FLOUR (Processed Citrus Rag/Core)

(b) (4)

DATE OF MANUFACTURE: 12/12/2012  
 DATE OF PACKAGING: 12/12/2012  
 EXPIRATION DATE: 12/12/2015

MICROBIAL ANALYSIS		METHOD
E.Coli (per g)	<10 CFU	AOAC 991.14
Salmonella/25g	Negative	Methods conform to the FDA/BAM manual.
PERCENT MOISTURE		
	6.0%	AOAC 926.08
PARTICLE SIZE		
passing through 30 mesh	99.0%	Jet-seive
WATER HOLDING CAPACITY (AACC Standard Method 56-30)		
WHC	8.44	g water / g dry material

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# Final Report

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**Completion Date:** March 13, 2013  
**Date Submitted:** February 27, 2013  
**Medallion Company ID:** FIBERSTAR01  
**Company Code:** 12532

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**Library Number:** 2013-MED-2125  
**PO Number:** 022613AJ

**Fax:**

**Medallion Labs Sample ID:** 2013-MED-2125-01

Citrus Fiber

**Customer Sample ID:** 0226-JBT

Assay Group	Test	Results	Test Date
Sample Handling Processing Level 1	Sample Process Fee	Sample Processed	02/27/13
<sup>2</sup> Mercury	Mercury	0.381 ppb	03/12/13
Lead by ICP-MS	Lead	312 ppb	02/28/13
Arsenic by ICP-MS	Arsenic	<10 ppb	02/28/13
Cadmium by ICP-MS	Cadmium	<10 ppb	02/28/13

**Medallion Labs Sample ID:** 2013-MED-2125-02

Citrus Fiber

**Customer Sample ID:** 0226-MexOP

Assay Group	Test	Results	Test Date
Sample Handling Processing Level 1	Sample Process Fee	Sample Processed	02/27/13
<sup>2</sup> Mercury	Mercury	0.976 ppb	03/12/13
Lead by ICP-MS	Lead	91 ppb	02/28/13
Arsenic by ICP-MS	Arsenic	13 ppb	02/28/13
Cadmium by ICP-MS	Cadmium	<10 ppb	02/28/13

**Results Approved By:** Vaishali Ratnam (Authorized Reviewer)

## Method References:

Assay Group	Method Reference
Arsenic by ICP-MS	AOAC: 993.14*, 2006.03*
Cadmium by ICP-MS	AOAC: 993.14*, 2006.03*
Lead by ICP-MS	AOAC: 993.14*, 2006.03*
Mercury	EPA 7473

\* This method has been modified.

**Medallion Labs maintains A2LA accreditation to ISO/IEC 17025 for the specific tests listed in A2LA Certificate # 2769.01.**

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Unless otherwise noted above, samples were received in acceptable condition and analyzed as received.

Limits of Detection and Measurement Variability are available upon request.

<sup>2</sup> This test is not considered in-scope of our current A2LA accreditation. For a listing of in-scope tests, please visit [www.medlabs.com](http://www.medlabs.com).

## **ATTACHMENT 2**

Stability of Citrus Flour



# FIBERSTAR<sup>TM</sup>

March 19, 2013

To whom it may concern:

Because of the similarities in both the production process and composition of the final product, the stability and shelf life of the citrus fiber/flour products made from citrus peel and citrus rag/core are expected to be the same as those products made from the pulp. We have run stability testing of multiple Citri-Fi® products produced from the pulp and proven that the product is indeed stable for at least 36 months. We have evaluated the moisture content, microbiology, and its functionality as measured by water holding capacity and in all cases found the product was stable for its 36 month shelf life. The data supporting this is shown on subsequent pages.

We have analyzed the composition and are in the process of analyzing the stability data for the products made from citrus peel and rag/core and based on our experience in working with these products, we believe that these products will also be stable for at least 36 months.

Sincerely,

(b) (6)

Brock Lundberg, Ph.D.  
Fiberstar, Inc.  
Director of Technology



**Stability data on citrus pulp based products****Citri-Fi 100 Data:**

<b>CF 100 Products</b>	<b>Batch</b>	<b>Age (in months)</b>	<b>WHC g water/g Citri Fi (spec 6 to 10)</b>	<b>Moisture % Spec &lt;10%</b>
CF 100	(b) (4)	0	9.65	7.9
CF 100	(b) (4)	33	8.65	7.2
CF 100FG	(b) (4)	0	9.65	5.09
CF 100FG	(b) (4)	37	9.06	5.99
CF 100FG	(b) (4)	41	7.18	7.29
CF 100FG	(b) (4)	0	6.85	4.5
CF 100FG	(b) (4)	42	7.15	8.28
CF 100M40	(b) (4)	0	7.43	4.91
CF 100M40	(b) (4)	40	6.12	8.67
CF 100M40	(b) (4)	0	6.81	3.6
CF 100M40	(b) (4)	37	8.12	8.08
CF 100M40	(b) (4)	0	7.91	3.32
CF 100M40	(b) (4)	32	6.56	7.08

**Citri Fi 200 Data:**

<b>CF 200 Products</b>	<b>Batch</b>	<b>Age (in months)</b>	<b>WHC g water/g Citri Fi (spec 10.5 to 16.5)</b>	<b>Moisture %Spec &lt;10%</b>
CF 200	(b) (4)	0	13.24	8.17
CF 200	(b) (4)	39	11.01	8.3
CF 200	(b) (4)	0	11.77	9.12
CF 200	(b) (4)	31	11.51	8.47
CF 200	(b) (4)	0	12.93	9.13
CF 200	(b) (4)	31	11.51	8.57
CF 200	(b) (4)	0	12.61	7.43
CF 200	(b) (4)	36	11.15	8.5
CF 200FG	(b) (4)	0	11.46	6.72
CF 200FG	(b) (4)	33	10.5	6.39

**Citri Fi 300 Data:**

<b>CF 300FG</b>	<b>Batch</b>	<b>Age (in months)</b>	<b>Moisture % Spec &lt;10%</b>
CF 300FG	(b) (4)	0	7.82
CF 300FG	(b) (4)	39	7.07

**Micro Data:**

<b>Product</b>	<b>APC (cfu/g) spec &lt;10,000 cfu/g</b>	<b>Yeast (cfu/g) spec &lt;250 cfu/g</b>	<b>Mold (cfu/g) spec &lt;205 cfu/g</b>	<b>Product Age</b>
CF 100	20 cfu/g	<10 cfu/g	<10 cfu/g	60 months
CF 100	<10 cfu/g	<10 cfu/g	<10 cfu/g	60 months
CF 100FG	100 cfu/g	<10 cfu/g	<10 cfu/g	47 months
CF 100FG	70 cfu/g	<10 cfu/g	80 cfu/g	40 months
CF 100M40	50 cfu/g	<10 cfu/g	<10 cfu/g	45 months
CF 100M40	30 cfu/g	<10 cfu/g	<10 cfu/g	39 months
CF 200	10 cfu/g	<10 cfu/g	<10 cfu/g	56 months
CF 200	270 cfu/g	<10 cfu/g	<10 cfu/g	45 months
CF 200FG	60 cfu/g	<10 cfu/g	10 cfu/g	40 months
CF 200FG	60 cfu/g	<10 cfu/g	20 cfu/g	39 months
CF 200M40	70 cfu/g	<10 cfu/g	20 cfu/g	55 months
CF 200M40	60 cfu/g	<10 cfu/g	<10 cfu/g	42 months
CF 300FG	30 cfu/g	<10 cfu/g	<10 cfu/g	47 months
CF 300FG	10 cfu/g	<10 cfu/g	10 cfu/g	41 months
CF 300M40	400 cfu/g	<10 cfu/g	80 cfu/g	59 months
CF 300M40	<10 cfu/g	<10 cfu/g	<10 cfu/g	45 months

## **ATTACHMENT 3**

### **Allergenicity of Citrus Flour**

October 4, 2012

To Whom It May Concern:

As requested, I am providing my expert opinion on the potential allergenicity of several Citrus Fiber products manufactured by Fiberstar, Inc. This letter supersedes an expert opinion letter from August 2007. The raw materials used in the manufacturing of these Citrus Fiber products will be expanded from the juice cells (also known as pulp cells, juice vesicles or pulp) from oranges to the juice cells, peels, rags or segment membranes, and cores of oranges, lemons, limes and grapefruit. Additionally, the potential uses of these Citrus Fiber products have also been extended to other product categories.

With these changes, my expert opinion remains unchanged from 2007. In my expert opinion, these citrus fiber products present essentially no allergenic risk to consumers. These citrus fiber products, also known as citrus flour products, are composed of the juice cells, peels, rags or segment membranes, and cores of oranges, lemons, limes and grapefruit that have been dewatered, sheared, dried and ground. Guar gum is added to some products. As a food ingredient, guar gum has no history of causing allergic reaction. Citrus fruits are reported to cause occasional allergic reactions, but citrus fruits are not among the most commonly allergenic foods. Allergic reactions to citrus fruits are both rare and typically mild. Furthermore, no reports exist of allergic reactions to citrus pulp or fiber; the few reports involve reactions to the fruit and not the pulp. The protein contents of these citrus fiber products are appreciable (approx. 10%), but the usage level of this ingredient in typical formulations is comparatively low. For these reasons, I do not believe that these citrus fiber products are likely to pose any allergenic risk even to the few citrus-allergic consumers in the population.

Additionally, if these citrus fiber products are labeled as recommended, the presence of a citrus-based ingredient would be readily identifiable on the ingredient statement and individuals with allergies to citrus fruits would likely avoid the product.

You have my permission to share this letter with prospective customers and regulatory authorities if necessary.

Sincerely,

(b) (6)

Steve L. Taylor, Ph.D.  
Professor and Co-Director

**ATTACHMENT 4**

**Certificates of Analysis  
(flavonoids)**



# NPA Laboratories

2199 S Grand Ave. Santa Ana, Ca 92705 • Tel: (714) 656-3915  
Email: info@npalab.com • Web: www.npalab.com

## Certificate of Analysis

**Fiberstar Inc.**  
713 St. Croix St.  
River Falls, WI 54022

Date: 2012/11/18

NPA Reference #: Fiberstar\_11122012

**Product Sample** Citrus Fiber  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Flavonoid (as Hesperidin)	7.92	mg/g	HPLC

(b) (6)

\_\_\_\_\_  
Director of Operation

This report is issued in accordance with Standard Term and Conditions including but not limited to our services and report are for the benefit of our customer and may not be used by any other party for any purpose and relate solely to the sample in our possession and can not be applied to any other material.



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Email: info@npalab.com • Web: www.npalab.com

## Certificate of Analysis

**Fiberstar Inc.**  
713 St. Croix St.  
River Falls, WI 54022

Date: 2012/11/18

NPA Reference #: Fiberstar\_11122012

**Product Sample** Citrus Fiber  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Flavonoid (as Hesperidin)	11.02	mg/g	HPLC

(b) (6)

\_\_\_\_\_  
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## Certificate of Analysis

**Fiberstar Inc.**  
713 St. Croix St.  
River Falls, WI 54022

Date: 2012/11/18

NPA Reference #: Fiberstar\_11122012

**Product Sample** Citrus Fiber

**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Flavonoid (as Hesperidin)	15.09	mg/g	HPLC

(b) (6)

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## Certificate of Analysis

**Fiberstar Inc.**  
713 St. Croix St.  
River Falls, WI 54022

Date: 2012/11/18

NPA Reference #: Fiberstar\_11122012

**Product Sample** Citrus Fiber-A  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Flavonoid (as Hesperidin)	22.28	mg/g	HPLC

(b) (6)

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## Certificate of Analysis

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713 St. Croix St.  
River Falls, WI 54022

Date: 2012/11/18

NPA Reference #: Fiberstar\_11122012

**Product Sample** Citrus Fiber-A  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Flavonoid (as Hesperidin)	22.82	mg/g	HPLC

(b) (6)

\_\_\_\_\_  
Director of Operation

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## Certificate of Analysis

**Fiberstar Inc.**  
713 St. Croix St.  
River Falls, WI 54022

Date: 2012/11/18

NPA Reference #: Fiberstar\_11122012

**Product Sample** Citrus Fiber-A  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Flavonoid (as Hesperidin)	22.73	mg/g	HPLC

(b) (6)

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**ATTACHMENT 5**

**Certificates of Analysis  
(Quercetin)**



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## Certificate of Analysis

**Fiberstar Inc.**  
713 St. Croix St.  
River Falls, WI 54022

**Date:** 2012/12/13

**NPA Reference #:** Fiberstar\_12122012

**Product Sample** Citrus Fiber  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Quercetin	0.12	mg/g	HPLC

(b) (6)

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## Certificate of Analysis

**Fiberstar Inc.**  
713 St. Croix St.  
River Falls, WI 54022

**Date:** 2012/12/13

**NPA Reference #:** Fiberstar\_12122012

**Product Sample** Citrus Fiber

**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Quercetin	0.24	mg/g	HPLC

(b) (6)

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**Fiberstar Inc.**  
713 St. Croix St.  
River Falls, WI 54022

**Date:** 2012/12/13

**NPA Reference #:** Fiberstar\_12122012

**Product Sample** Citrus Fiber  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Quercetin	0.24	mg/g	HPLC

(b) (6)

\_\_\_\_\_  
Director of Operation

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## Certificate of Analysis

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713 St. Croix St.  
River Falls, WI 54022

**Date:** 2012/12/13

**NPA Reference #:** Fiberstar\_12122012

**Product Sample** Citrus Fiber-A  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Quercetin	0.11	mg/g	HPLC

(b) (6)

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713 St. Croix St.  
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**Date:** 2012/12/13

**NPA Reference #:** Fiberstar\_12122012

**Product Sample** Citrus Fiber-A  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Quercetin	0.11	mg/g	HPLC

(b) (6)

\_\_\_\_\_  
Director of Operation

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**Date:** 2012/12/13

**NPA Reference #:** Fiberstar\_12122012

**Product Sample** Citrus Fiber-A  
**Lot No.** (b) (4)

Analysis	Result	Unit	Method
Quercetin	0.12	mg/g	HPLC

(b) (6)

\_\_\_\_\_  
Director of Operation

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Exponent®

*Center for Chemical Regulation and Food  
Safety*

**INTAKE ASSESSMENT OF A  
CITRUS FIBER PRODUCT**

## **INTAKE ASSESSMENT OF A CITRUS FIBER PRODUCT**

Prepared for

Dale Lindquist  
Fiberstar, Inc.  
3023 15<sup>th</sup> Street S.W.,  
Wilmar, MN 56201-9670

Prepared by

Exponent, Inc.  
1150 Connecticut Avenue, NW  
Suite 1100  
Washington, DC 20036

October 26, 2012

© Exponent, Inc.

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## **List of Acronyms**

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CDC	Centers for Disease Control and Prevention
DHHS	Department of Health and Human Services
EDI	Estimated daily intake
NCHS	National Center for Health Statistics
NHANES	National Health and Nutrition Examination Survey
USDA	U.S. Department of Agriculture

## **Introduction**

---

At the request of Fiberstar, Inc. (Fiberstar), Exponent conducted an intake assessment to estimate the total daily intake of a “citrus fiber product” (“citrus fiber”) from proposed food uses by the US population 2 years and older. In addition, Exponent determined the cumulative estimated daily intake from proposed uses of citrus fiber and background intake from oranges and other citrus based on foods reported consumed in the 2003-2008 National Health and Nutrition Examination Survey (NHANES) food consumption data. The data and methods used to develop the estimated daily intake (EDI) of citrus fiber and results are provided in this report.



## **Data and Methods**

---

### **Proposed Use**

A “citrus fiber product” derived from peel, rag, core, and pulp from all types of oranges (including mandarin oranges and tangerines but excluding bitter oranges), and other citrus (limes, lemons, grapefruits) is proposed to be used as a:

- moisture enhancer in baked goods, pastas, salad dressings, confectionery, processed cheese spreads, frozen food entrees (i.e. frozen dough's, frozen meat, products, frozen baked goods, frozen desserts, and frozen dairy products),
- flavor enhancer in non-carbonated beverages and fruit drinks,
- moisture retention and in seasoning brine and solutions in processed meat and poultry products, and
- processing aid in salads, sauces, meats, fillings, dips, bakery, dairy, fruit and vegetable based products, pizza product

The maximum proposed use levels of citrus fiber in these foods range from 1% to 5%. A summary of the intended technical function, maximum proposed use levels (%), food types and descriptions are summarized in Table 1.

Table 1. Proposed Food Uses for Citrus Fiber

Technical Function & Max Proposed Use Level	Food Types and Description <sup>1</sup>
<b>Moisture retention 5%</b>	Baked goods -Includes breads and rolls; bagels; biscuits; muffins; tortillas; cake; cookies; brownies; pies; pastries; doughnuts; breakfast/cereal and granola bars; crackers; pancakes/waffles; pretzels; and portion of mixtures (sandwiches, burgers) containing the same. -Excludes flour.
	Pastas -Includes macaroni; noodles; spaghetti; lasagna; other pastas; and portion of mixtures (beef stroganoff, turkey tetrazzini, spaghetti with sauce, casseroles) containing the same.
	Salad dressings -Includes salad dressings (all types, regular, low-fat, fat-free); mayonnaise; and portion of mixtures (tuna salad, pasta salad, sandwiches, burgers) containing the same.
	Confectionery -Includes frosting/icing; frosting/icing from baked goods <sup>2</sup> ; sugar substitutes; sweet sauces; toppings; syrups; soft and hard candy (incl bars, chocolates, caramel, nougat, mint, toffee); and jams and jellies.
	Processed cheese spreads -Includes cream cheese (all types); cream cheese based dip; and portion of mixtures (gelatin dessert, crab meat puffs) containing the same.
	Frozen food entrees (i.e. Frozen dough's, frozen meat, products, frozen baked goods, frozen desserts, and frozen dairy products) -Includes frozen yogurt (all types); whipped topping; ice cream and novelties(all types); frozen dinner/entrees; pizza; French fries.
<b>Flavor enhancing 2%</b>	Non-carbonated beverages -Includes ready-to-drink (RTD) coffee substitutes; flavored water drinks; and RTD coffee and tea. -Excludes alcoholic beverages and energy drinks.
	Fruit drinks -Includes fruit drinks/ades; fruit flavored drinks; fruit; and vegetable juices (orange, grape, tomato, etc.); and nectar.
<b>Moisture retention and in seasoning brine and solutions 3%</b>	Processed meat -Includes corned beef; luncheon meats; cured, canned, or smoked meats; sausage, hot dogs, bacon; hamburger patties and meatballs; and portion of mixtures (sandwiches, burgers, pizza, ham and noodles, baked beans with meat) containing the same. -Excludes fish and seafood products.
	Poultry products -Includes processed poultry products such as luncheon meats; cured, canned, or smoked poultry; sausage; and chicken nuggets.

Technical Function & Max Proposed Use Level	Food Types and Description <sup>1</sup>
<b>Processing aid 1%</b>	<p>Salads</p> <ul style="list-style-type: none"> <li>-Includes meat/poultry/fish salads (crab, chicken, beef); potato salad; coleslaw; pasta salad; and fruit salads.</li> <li>-Excludes green leafy salads.</li> </ul>
	<p>Sauces</p> <ul style="list-style-type: none"> <li>-Includes creamy sauces (white, cheese); gravy; black bean sauce; soy sauce; teriyaki; Worcestershire; salsa; enchilada sauce; tomato sauce; ketchup; cocktail; mustard sauce; tartar sauce; pesto sauce; oyster-flavored; barbeque; and portion of mixtures (meat with barbeque sauce, beef curry, meat/poultry/fish in tomato sauce or gravy; sandwiches and burgers; burritos, tacos, etc.; pizza; pasta dishes) containing the same.</li> </ul>
	<p>Meats</p> <ul style="list-style-type: none"> <li>-Includes corned beef; luncheon meats; cured, canned, or smoked meats; sausage, hot dogs, bacon; hamburger patties and meatballs; and portion of mixtures (sandwiches, burgers, pizza, ham and noodles, baked beans with meat) containing the same.</li> <li>-Excludes fish and seafood products.</li> </ul>
	<p>Fillings</p> <ul style="list-style-type: none"> <li>-Includes fillings and filling from baked goods<sup>2</sup>.</li> </ul>
	<p>Dips</p> <ul style="list-style-type: none"> <li>-Includes cheese, salsa, guacamole, other vegetable dips.</li> </ul>
	<p>Bakery</p> <ul style="list-style-type: none"> <li>-Includes breads and rolls; bagels; biscuits; muffins; tortillas; cake; cookies; brownies; pies; pastries; doughnuts; breakfast/cereal and granola bars; crackers; pancakes/waffles; pretzels; and portion of mixtures (sandwiches, burgers) containing the same.</li> <li>-Excludes flour.</li> </ul>
	<p>Dairy</p> <ul style="list-style-type: none"> <li>-Includes dairy product analogs; reconstituted and not reconstituted milk products (buttermilk, soy milk, cocoa and cocoa mix, instant breakfast); yogurt; frozen yogurt; ice cream; cream; whipped topping; cheese; pudding; and portion of mixtures (sandwiches, burgers, omelet, burritos, tacos, nachos, pizza, pasta dishes) containing the same.</li> <li>-Excludes milk.</li> </ul>
	<p>Fruit and vegetable based products</p> <ul style="list-style-type: none"> <li>-Includes processed fruits and vegetables (dishes, dips, canned and frozen fruits, canned frozen vegetables with sauce, dried, chips, popcorn, commercial soups, and pickled fruits and vegetables.</li> </ul>
	<p>Pizza product</p> <ul style="list-style-type: none"> <li>-Includes all types of pizza (thin, regular, thick crust), with cheese, vegetables, meat, etc.</li> </ul>

<sup>1</sup> Excludes baby foods from all food types

<sup>2</sup> Captured average frosting/icing or filling portion of baked good food: 30% cakes/cupcakes, 20% brownies, 30% cookie; 80% pies, 10% pastries.

## **Consumption Data**

Intake estimates were based on food consumption records collected as part of the National Health and Examination Survey conducted in 2003-2004, 2005-2006, and 2007-2008 (NHANES 2003-2008). This continuous survey is a complex multistage probability sample designed to be representative of the civilian U.S. population (NCHS 2007, 2008, 2009). The NHANES datasets provide nationally representative nutrition and health data and prevalence estimates for nutrition and health status measures in the United States. The NHANES survey over-samples minorities, low-income groups, adolescents ages 12-19 years, and adults 60 years of age and older. Statistical weights are provided by the National Center for Health Statistics (NCHS) for the surveys to adjust for the differential probabilities of selection. As part of the examination, trained dietary interviewers collect detailed information on all foods and beverages consumed by respondents in the previous 24 hour time period (midnight to midnight). A second dietary recall is administered by telephone 3 to 10 days after the first dietary interview, but not on the same day of the week as the first interview. The dietary component of the survey is conducted as a partnership between the U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (DHHS). DHHS is responsible for the sample design and data collection, and USDA is responsible for the survey's dietary data collection methodology, maintenance of the databases used to code and process the data, and data review and processing. A total of 24,621 individuals in the survey period 2003-2008 provided 2 complete days of dietary recalls.

Exponent identified foods with reported consumption in the 2003-2008 NHANES that are representative of the proposed food types (see Table 1) for inclusion in the intake assessment. Additional food descriptions and food examples are also summarized in Table 1. The comprehensive list of NHANES foods selected and included in the intake assessment is provided in Appendix I of this report.

## **Analysis**

Using the NHANES consumption data, Exponent estimated 2-day average intake of citrus fiber for the U.S. population 2+ years. The analysis was limited to individuals who provided two complete and reliable dietary recalls as determined by NCHS. The 2-day average intakes by each individual were estimated using Exponent's Foods and Residues Evaluation Program (FARE™ version 9.33) software. Exponent uses the statistically weighted values from the survey in its analyses. The statistical weights compensate for variable probabilities of selection, adjust for non-response, and provide intake estimates that are representative of the U.S. population.

Consumption data in the NHANES survey are reported on an "as consumed basis". That is, if a survey participant consumed an apple pie, the consumption amount reported in the survey for that subject would be for the amount of pie consumed, and not for the ingredients (flour, butter, apples, sugar, etc.) used to make that pie. Exponent has developed recipes that allow for the translation of foods as consumed into their various ingredients. These recipes build on "intermediate" recipes that have been developed by USDA and CDC and are used in Exponent's FARE™ software. Consumption of the targeted food type with proposed citrus fiber use was estimated using these recipes when the target food type was a component of the reported food (i.e., pasta component from pasta salad). For the proposed use of citrus fiber in confectionery and fillings, Exponent calculated the average proportion of frosting/icing or filling in baked good foods (i.e., cakes with frost, pies and pastries with filling) and applied the proportion to estimate only the proposed food type component. The average proportion of frosting/icing or filling in baked good foods is 30% in cakes/cupcakes, 20% in brownies, 30% in cookies, 80% in pies, and 10% in pastries.

In the analysis, the 2-day average intake of citrus fiber was estimated by multiplying the reported intake of foods from the 24-hr recall with the citrus fiber proposed use level (see Table 1) and the cumulative sum over the two 24-hr recalls was divided by two.

## **Background Intake**

Background exposure to citrus fiber were estimated based on the total dietary fiber content (Code 291) in orange and other citrus-based food and beverages with reported consumption in the NHANES 2003-2008. The nutrient composition data as reported in the USDA Food and Nutrient Database for Dietary Studies (FNDDS 4.1) supplemented by other FNDDS versions were relied upon for this analysis. The FNDDS 4.1 is based on the USDA National Nutrient Database Standard Reference SR22. The SR food codes selected for this background citrus fiber intake assessment are summarized in Appendix 2.

## Results

The estimated daily intakes of citrus fiber are presented for the US population 2+ yrs, at the mean and 90<sup>th</sup> percentile, on a *per capita* and *per user* basis, and in units of g/d and g/kg-bw/d. The background estimated daily intake of dietary fiber from oranges and other citrus for the US population 2+ yrs is presented Table 2. The estimated daily intake of citrus fiber from the proposed uses by technical function and food type are presented in Table 3 (g/d) and Table (g/kg-bw/d). In addition, Tables 2 and 3 provide the total estimated daily intake of citrus fiber by each proposed food types, each intended technical function, and from the total combined proposed food uses. Finally, Table 4 presents the total cumulative estimate daily intake of citrus fiber from background (from oranges and other citrus) and proposed uses.

The *per user* background intake of citrus fiber is 0.7 g/day (0.01 g/kg/day) and 1.6 g/day (0.03 g/kg/day), respectively, by the US population 2+ yrs. The *per user* estimated daily intake of citrus fiber from all proposed food uses by the US population 2+ yrs is 23.4 mg/d (0.4 mg/kg-bw/d) and 39.5 mg/d (0.8 mg/kg-bw/d) at the mean and 90<sup>th</sup> percentile, respectively. The cumulative *per user* estimated daily intake of citrus fiber from all proposed food uses and background sources by the US population 2+ yrs is 23.7 mg/d (0.4 mg/kg-bw/d) and 39.9 mg/d (0.8 mg/kg-bw/d) at the mean and 90<sup>th</sup> percentile, respectively.

**Table 2. Background estimated daily intake of fiber from oranges and other citrus for the US population 2 years and older; NHANES 2003-2008, 2-day average**

Fiber from oranges and other citrus	Unwtd No. Users	% User	Per Capita		Per User	
			Mean	90th percentile	Mean	90th percentile
g/d	13,218	53.9	0.4	1.1	0.7	1.6
g/kg-bw/d	13,218	53.9	0.01	0.02	0.01	0.03

**Table 3. Estimated daily intake of citrus fiber by proposed food types, intended technical function, and total combined proposed food uses for the US population 2 years and older (g/d); NHANES 2003-2008, 2-day average**

Technical Function	Food Types	Unwtd No. Users	% User	Per Capita (g/d)		Per User (g/d)	
				Mean	90th percentile	Mean	90th percentile
<b>Moisture retention</b>	Baked goods	22,130	97.8	6.19	11.72	6.33	11.81
	Pastas	8,287	38.2	1.59	5.37	4.16	8.78
	Salad dressings	12,393	60.0	0.57	1.68	0.96	2.18
	Confectionery	14,696	66.3	0.91	2.56	1.38	3.12
	Processed cheese spreads	1,259	6.7	0.06	0	0.84	1.52
	Frozen food entrees	11,779	52.8	2.19	6.55	4.15	8.60
	<b>Total</b>	<b>22,505</b>	<b>99.6</b>	<b>11.5</b>	<b>20.6</b>	<b>11.6</b>	<b>20.6</b>
<b>Flavor enhancing</b>	Non-carbonated beverages	5,426	26.5	1.99	7.06	7.52	15.55
	Fruit drinks	14,617	55.1	3.62	9.97	6.57	13.30
	<b>Total</b>	<b>16,832</b>	<b>68.3</b>	<b>5.6</b>	<b>14.4</b>	<b>8.2</b>	<b>17.0</b>
<b>Moisture retention and in seasoning brine and solutions</b>	Processed meat	16,220	70.9	1.24	3.38	1.76	3.94
	Poultry products	3,899	16.7	0.22	0.90	1.34	2.42
	<b>Total</b>	<b>17,356</b>	<b>76.2</b>	<b>1.5</b>	<b>3.7</b>	<b>1.9</b>	<b>4.2</b>
<b>Processing aid</b>	Salads	3,163	16.9	0.13	0.49	0.77	1.51
	Sauces	17,954	79.6	0.51	1.30	0.64	1.43
	Meats	17,356	76.2	0.49	1.22	0.64	1.39
	Fillings	4,734	22.0	0.05	0.07	0.23	0.68
	Dips	3,937	17.7	0.06	0.16	0.34	0.85
	Bakery	22,130	97.8	1.24	2.34	1.27	2.36
	Dairy	20,659	92.6	1.12	2.64	1.20	2.75
	Fruit and vegetable based products	18,487	81.9	0.82	2.06	1.00	2.26
	Pizza product	5,355	22.6	0.31	1.20	1.36	2.72
	<b>Total</b>	<b>22,587</b>	<b>99.9</b>	<b>4.7</b>	<b>8.1</b>	<b>4.7</b>	<b>8.1</b>
<b>Total combined proposed food uses</b>		<b>22,597</b>	<b>100.0</b>	<b>23.3</b>	<b>39.5</b>	<b>23.4</b>	<b>39.5</b>



**Table 4. Estimated daily intake of citrus fiber by proposed food types, intended technical function, and total combined proposed food uses for the US population 2 years and older (g/kg-bw/d); NHANES 2003-2008, 2-day average**

Technical Function	Food Types	Unwtd No. Users	% User	Per Capita (g/kg-bw/d)		Per User (g/kg-bw/d)	
				Mean	90th percentile	Mean	90th percentile
<b>Moisture retention</b>	Baked goods	22,130	97.8	0.10	0.21	0.10	0.21
	Pastas	8,287	38.2	0.03	0.09	0.07	0.16
	Salad dressings	12,393	60.0	0.01	0.02	0.01	0.03
	Confectionery	14,696	66.3	0.02	0.04	0.02	0.06
	Processed cheese spreads	1,259	6.7	<0.005	0	0.01	0.03
	Frozen food entrees	11,779	52.8	0.04	0.11	0.07	0.15
	<b>Total</b>	<b>22,505</b>	<b>99.6</b>	<b>0.2</b>	<b>0.4</b>	<b>0.2</b>	<b>0.4</b>
<b>Flavor enhancing</b>	Non-carbonated beverages	5,426	26.5	0.03	0.10	0.11	0.22
	Fruit drinks	14,617	55.1	0.07	0.19	0.13	0.28
	<b>Total</b>	<b>16,832</b>	<b>68.3</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0.3</b>
<b>Moisture retention and in seasoning brine and solutions</b>	Processed meat	16,220	70.9	0.02	0.05	0.03	0.06
	Poultry products	3,899	16.7	<0.005	0.02	0.03	0.05
	<b>Total</b>	<b>17,356</b>	<b>76.2</b>	<b>0.02</b>	<b>0.06</b>	<b>0.03</b>	<b>0.07</b>
<b>Processing aid</b>	Salads	3,163	16.9	<0.005	0.01	0.01	0.02
	Sauces	17,954	79.6	0.01	0.02	0.01	0.02
	Meats	17,356	76.2	0.01	0.02	0.01	0.02
	Fillings	4,734	22.0	<0.005	<0.005	<0.005	0.01
	Dips	3,937	17.7	<0.005	<0.005	<0.005	0.01
	Bakery	22,130	97.8	0.02	0.04	0.02	0.04
	Dairy	20,659	92.6	0.02	0.05	0.02	0.05
	Fruit and vegetable based products	18,487	81.9	0.01	0.03	0.02	0.04
	Pizza product	5,355	22.6	0.01	0.02	0.02	0.05
	<b>Total</b>	<b>22,587</b>	<b>99.9</b>	<b>0.08</b>	<b>0.2</b>	<b>0.08</b>	<b>0.2</b>
<b>Total combined proposed food uses</b>		<b>22,597</b>	<b>100.0</b>	<b>0.4</b>	<b>0.8</b>	<b>0.4</b>	<b>0.8</b>

**Table 5. Cumulative estimated daily intake (proposed + background) of a citrus fiber by the US population 2 years and older; NHANES 2003-2008, 2-day average**

Citrus Fiber	Unwtd No. Users	% User	Per Capita		Per User	
			Mean	90th percentile	Mean	90th percentile
g/d	22,597	100.0	23.7	39.9	23.7	39.9
g/kg-bw/d	22,597	100.0	0.4	0.8	0.4	0.8

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## Appendix I. NHANES Food Codes Included in Analysis of Proposed Uses

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### Moisture Retention

#### Baked Goods

Food Code	Food Description
14640100	Cheese sandwich, grilled*
27500050	Sandwich, NFS*
27500200	Wrap sandwich, filled with meat, poultry, or fish, vegetables, and cheese*
27500300	Wrap sandwich, filled with meat, poultry, or fish, and vegetables*
27510110	Beef barbecue sandwich or Sloppy Joe, on bun*
27510210	Cheeseburger, plain, on bun*
27510220	Cheeseburger, with mayonnaise or salad dressing, on bun*
27510230	Cheeseburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510240	Cheeseburger, 1/4 lb meat, plain, on bun*
27510250	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing, on bun*
27510260	Cheeseburger, 1/4 lb meat, with mushrooms in sauce, on bun*
27510280	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on bun*
27510290	Double cheeseburger (2 patties), plain, on double-decker bun*
27510300	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on double-decker bun*
27510310	Cheeseburger with tomato and/or catsup, on bun*
27510311	Cheeseburger, 1 oz meat, plain, on miniature bun*
27510320	Cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510330	Double cheeseburger (2 patties), with tomato and/or catsup, on bun*
27510340	Double cheeseburger (2 patties), with mayonnaise or salad dressing and tomatoes, on bun*
27510350	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510360	Cheeseburger with mayonnaise or salad dressing, tomato and bacon, on bun*
27510370	Double cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510375	Double cheeseburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510380	Triple cheeseburger (3 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510390	Double bacon cheeseburger (2 patties, 1/4 lb meat each), on bun*
27510400	Bacon cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510410	Chiliburger, on bun*
27510420	Taco burger, on bun*
27510425	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510430	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510440	Bacon cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510450	Cheeseburger, 1/4 lb meat, with ham, on bun*
27510500	Hamburger, plain, on bun*
27510510	Hamburger, with tomato and/or catsup, on bun
27510520	Hamburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510530	Hamburger, 1/4 lb meat, plain, on bun*
27510540	Double hamburger (2 patties), with tomato and/or catsup, on bun*
27510550	Double hamburger (2 patties), with mayonnaise or salad dressing and tomatoes, on double-decker bun*
27510560	Hamburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510590	Hamburger, with mayonnaise or salad dressing, on bun*
27510600	Hamburger, 1 oz meat, plain, on miniature bun*
27510620	Hamburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510680	Double hamburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510690	Double hamburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes and/or catsup, on double-decker bun*

27510700	Meatball and spaghetti sauce submarine sandwich*
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread*
27511010	Pastrami sandwich*
27513010	Roast beef sandwich*
27513040	Roast beef submarine sandwich, with lettuce, tomato and spread*
27513050	Roast beef sandwich with cheese*
27513070	Roast beef submarine sandwich, on roll, au jus*
27515010	Steak sandwich, plain, on roll*
27515020	Steak and cheese submarine sandwich, with lettuce and tomato*
27515040	Steak and cheese submarine sandwich, plain, on roll*
27515070	Steak and cheese submarine sandwich, with fried peppers and onions, on roll*
27515080	Steak sandwich, plain, on biscuit*
27516010	Gyro sandwich (pita bread, beef, lamb, onion, condiments), with tomato and spread*
27520130	Bacon, chicken, and tomato club sandwich, with lettuce and spread*
27520135	Bacon, chicken, and tomato club sandwich, with cheese, lettuce and spread*
27520150	Bacon, lettuce, and tomato sandwich with spread*
27520160	Bacon, chicken, and tomato club sandwich, on multigrain roll with lettuce and spread*
27520165	Bacon, chicken fillet (breaded, fried), and tomato club with lettuce and spread*
27520166	Bacon, chicken fillet (breaded, fried), and tomato club sandwich with cheese, lettuce and spread*
27520300	Ham sandwich, with spread*
27520310	Ham sandwich with lettuce and spread*
27520320	Ham and cheese sandwich, with lettuce and spread*
27520330	Ham and egg sandwich*
27520350	Ham and cheese sandwich, with spread, grilled*
27520360	Ham and cheese sandwich, on bun, with lettuce and spread*
27520370	Hot ham and cheese sandwich, on bun*
27520390	Ham and cheese submarine sandwich, on multigrain roll, with lettuce, tomato and spread*
27520500	Pork sandwich, on white roll, with onions, dill pickles and barbecue sauce*
27520510	Pork barbecue sandwich or Sloppy Joe, on bun*
27540110	Chicken sandwich, with spread*
27540120	Chicken salad or chicken spread sandwich*
27540130	Chicken barbecue sandwich*
27540140	Chicken fillet (breaded, fried) sandwich*
27540145	Chicken fillet (breaded, fried) sandwich on biscuit*
27540150	Chicken fillet (breaded, fried) sandwich with lettuce, tomato and spread*
27540170	Chicken patty sandwich, miniature, with spread*
27540180	Chicken patty sandwich or biscuit*
27540190	Chicken patty sandwich, with lettuce and spread*
27540200	Fajita-style chicken sandwich with cheese, on pita bread, with lettuce and tomato*
27540210	Wrap sandwich filled with chicken strips (breaded, fried), cheese, lettuce, and spread*
27540230	Chicken patty sandwich with cheese, on wheat bun, with lettuce, tomato and spread*
27540235	Chicken fillet, broiled, sandwich with lettuce, tomato, and spread*
27540240	Chicken fillet, (broiled), sandwich, on whole wheat roll, with lettuce, tomato and spread*
27540250	Chicken fillet, broiled, sandwich with cheese, on whole wheat roll, with lettuce, tomato and non-mayonaise type spread*
27540260	Chicken fillet, broiled, sandwich, on oat bran bun, with lettuce, tomato, spread*
27540270	Chicken fillet, broiled, sandwich, with lettuce, tomato, and non-mayonaise type spread*
27540280	Chicken fillet, broiled, sandwich with cheese, on bun, with lettuce, tomato and spread*
27540290	Chicken submarine sandwich, with lettuce, tomato, and spread*
27540300	Wrap sandwich filled with chicken strips (broiled), cheese, lettuce, and spread*
27540310	Turkey sandwich, with spread*
27540350	Turkey submarine sandwich, with cheese, lettuce, tomato and spread*
27541000	Turkey, ham, and roast beef club sandwich*
27550000	Fish sandwich, on bun, with spread*
27550100	Fish sandwich, on bun, with cheese and spread*
27550720	Tuna salad sandwich*
27550750	Tuna salad submarine sandwich, with lettuce and tomato*

27560110	Bologna sandwich, with spread*
27560320	Frankfurter or hot dog, plain, on bun*
27560330	Frankfurter or hot dog, with cheese, plain, on bun*
27560340	Frankfurter or hot dog, with catsup and/or mustard, on bun*
27560350	Pig in a blanket (frankfurter or hot dog wrapped in dough)*
27560360	Frankfurter or hot dog, with chili, on bun*
27560370	Frankfurter or hot dog with chili and cheese, on bun*
27560510	Salami sandwich, with spread*
27560670	Sausage and cheese on English muffin*
27560710	Sausage sandwich*
27560910	Submarine, cold cut sandwich, with lettuce and tomato*
32101500	Egg, Benedict*
32105190	Egg casserole with bread, cheese, milk and meat*
32202010	Egg, cheese, and ham on English muffin*
32202025	Egg, cheese and ham on bagel*
32202030	Egg, cheese, and sausage on English muffin*
32202035	Egg, cheese, and sausage on bun*
32202040	Egg, cheese, and beef on English Muffin*
32202045	Egg, cheese, and steak on bagel*
32202080	Egg, cheese, and bacon on English muffin*
32202085	Egg, cheese and bacon on bagel*
32202120	Egg, cheese and sausage on bagel*
42301010	Peanut butter sandwich*
42302010	Peanut butter and jelly sandwich*
51000100	Bread, NS as to major flour
51000110	Bread, NS as to major flour, toasted
51000180	Bread, made from home recipe or purchased at a bakery, NS as to major flour
51000190	Bread, made from home recipe or purchased at a bakery, toasted, NS as to major flour
51000200	Roll, NS as to major flour
51000250	Roll, made from home recipe or purchased at a bakery, NS as to major flour
51000300	Roll, hard, NS as to major flour
51000400	Roll, bran, NS as to type of bran
51101000	Bread, white
51101010	Bread, white, toasted
51101050	Bread, white, made from home recipe or purchased at a bakery
51101060	Bread, white, made from home recipe or purchased at a bakery, toasted
51102010	Bread, white with whole wheat swirl
51102020	Bread, white with whole wheat swirl, toasted
51105010	Bread, Cuban
51105040	Bread, Cuban, toasted
51107010	Bread, French or Vienna
51107040	Bread, French or Vienna, toasted
51108010	Focaccia, Italian flatbread, plain
51108100	Naan, Indian flatbread
51109010	Bread, Italian, Grecian, Armenian
51109040	Bread, Italian, Grecian, Armenian, toasted
51109100	Bread, pita
51109110	Bread, pita, toasted
51109150	Bread, pita with fruit
51110010	Bread, batter
51111010	Bread, cheese
51111040	Bread, cheese, toasted
51113010	Bread, cinnamon
51113100	Bread, cinnamon, toasted
51115010	Bread, cornmeal and molasses
51115020	Bread, cornmeal and molasses, toasted
51119010	Bread, egg, Challah
51119040	Bread, egg, Challah, toasted

51121010	Bread, garlic
51121040	Bread, garlic, toasted
51121110	Bread, onion
51122000	Bread, reduced calorie and/or high fiber, white or NFS
51122010	Bread, reduced calorie and/or high fiber, white or NFS, toasted
51122050	Bread, reduced calorie and/or high fiber, Italian
51122100	Bread, reduced calorie and/or high fiber, white or NFS, with fruit and/or nuts
51122300	Bread, white, special formula, added fiber
51123010	Bread, high protein
51126010	Bread, milk and honey
51126020	Bread, milk and honey, toasted
51127010	Bread, potato
51127020	Bread, potato, toasted
51129010	Bread, raisin
51129020	Bread, raisin, toasted
51133010	Bread, sour dough
51133020	Bread, sour dough, toasted
51134000	Bread, sweetpotato
51135000	Bread, vegetable
51140100	Bread, dough, fried
51150000	Roll, white, soft
51150100	Roll, white, soft, toasted
51151060	Roll, white, soft, made from home recipe or purchased at a bakery
51152000	Roll, white, soft, reduced calorie and/or high fiber
51153000	Roll, white, hard
51153010	Roll, white, hard, toasted
51154550	Roll, egg bread
51154600	Roll, cheese
51155000	Roll, French or Vienna
51155010	Roll, French or Vienna, toasted
51156500	Roll, garlic
51157000	Roll, hoagie, submarine
51158100	Roll, Mexican, bolillo
51159000	Roll, sour dough
51160000	Roll, sweet
51160010	Roll, sweet, toasted
51160100	Roll, sweet, cinnamon bun, no frosting
51160110	Roll, sweet, cinnamon bun, frosted
51161000	Roll, sweet, with fruit, no frosting
51161020	Roll, sweet, with fruit, frosted
51161030	Roll, sweet, with fruit, frosted, diet
51161050	Roll, sweet, with nuts, frosted
51161070	Roll, sweet, with fruit, frosted, fat free
51161100	Roll, sweet, with fruit and nuts, no frosting
51161150	Roll, sweet, with fruit and nuts, frosted
51161200	Roll, sweet, with nuts, no frosting
51161250	Roll, sweet, no topping, Mexican (Pan Dulce)
51161260	Roll, sweet, crumb topping, Mexican (Pan Dulce)
51161270	Roll, sweet, sugar topping, Mexican (Pan Dulce)
51161280	Roll, sweet, with raisins and icing, Mexican (Pan Dulce)
51165000	Coffee cake, yeast type
51165060	Coffee cake, yeast type, made from home recipe or purchased at a bakery
51165100	Coffee cake, yeast type, fat free, cholesterol free, with fruit
51166000	Croissant
51166100	Croissant, cheese
51166200	Croissant, chocolate
51166500	Croissant, fruit
51167000	Brioche

51168000	Bread, Spanish coffee
51180010	Bagel
51180020	Bagel, toasted
51180030	Bagel, with raisins
51180080	Bagel, with fruit other than raisins
51182010	Bread stuffing
51182020	Bread stuffing made with egg
51184000	Bread sticks, hard
51184010	Bread stick, soft
51184020	Bread stick, NS as to hard or soft
51184030	Bread stick, soft, prepared with garlic and parmesan cheese
51184100	Bread stick, hard, low sodium
51185000	Croutons
51186010	Muffin, English
51186020	Muffin, English, toasted
51186100	Muffin, English, with raisins
51187000	Melba toast
51187020	Anisette toast
51188100	Pannetone (Italian-style sweetbread)
51188500	Zwieback toast
51201010	Bread, whole wheat, 100%
51201020	Bread, whole wheat, 100%, toasted
51201060	Bread, whole wheat, 100%, made from home recipe or purchased at bakery
51201070	Bread, whole wheat, 100%, made from home recipe or purchased at bakery, toasted
51201120	Bread, whole wheat, 100%, with raisins, toasted
51201150	Bread, pita, whole wheat, 100%
51207010	Bread, sprouted wheat
51207020	Bread, sprouted wheat, toasted
51208000	Bagel, whole wheat, 100%
51208100	Bagel, whole wheat, 100%, with raisins
51220000	Roll, whole wheat, 100%
51300050	Bread, whole grain white
51300060	Bread, whole grain white, toasted
51300110	Bread, whole wheat, NS as to 100%
51300120	Bread, whole wheat, NS as to 100%, toasted
51300140	Bread, whole wheat, NS as to 100%, made from home recipe or purchased at bakery
51300150	Bread, whole wheat, NS as to 100%, made from home recipe or purchased at bakery, toasted
51300180	Bread, puri or poori (Indian puffed bread), whole wheat, NS as to 100%, fried
51300210	Bread, whole wheat, NS as to 100%, with raisins
51300220	Bread, whole wheat, NS as to 100%, with raisins, toasted
51301010	Bread, wheat or cracked wheat
51301020	Bread, wheat or cracked wheat, toasted
51301040	Bread, wheat or cracked wheat, made from home recipe or purchased at bakery
51301050	Bread, wheat or cracked wheat, made from home recipe or purchased at bakery, toasted
51301120	Bread, wheat or cracked wheat, with raisins
51301130	Bread, wheat or cracked wheat, with raisins, toasted
51301510	Bread, wheat or cracked wheat, reduced calorie and/or high fiber
51301520	Bread, wheat or cracked wheat, reduced calorie and/or high fiber, toasted
51301540	Bread, French or Vienna, whole wheat, NS as to 100%, made from home recipe or purchased at bakery
51301600	Bread, pita, whole wheat, NS as to 100%
51301620	Bread, pita, wheat or cracked wheat
51301700	Bagel, wheat
51301750	Bagel, whole wheat, NS as to 100%
51301800	Bagel, wheat, with raisins
51301820	Bagel, wheat, with fruit and nuts
51301900	Bagel, wheat bran
51302020	Bread, wheat bran, toasted



51302050	Bread, wheat bran, with raisins
51302060	Bread, wheat bran, with raisins, toasted
51302500	Muffin, English, wheat bran
51302520	Muffin, English, wheat bran, with raisins
51303010	Muffin, English, wheat or cracked wheat
51303030	Muffin, English, whole wheat, NS as to 100%
51303050	Muffin, English, wheat or cracked wheat, with raisins
51303070	Muffin, English, whole wheat, NS as to 100%, with raisins
51320010	Roll, wheat or cracked wheat
51320020	Roll, wheat or cracked wheat, toasted
51320500	Roll, whole wheat, NS as to 100%
51320530	Roll, whole wheat, NS as to 100%, made from home recipe or purchased at bakery
51401010	Bread, rye
51401020	Bread, rye, toasted
51401030	Bread, marble rye and pumpernickel
51401040	Bread, marble rye and pumpernickel, toasted
51401060	Bread, rye, reduced calorie and/or high fiber
51404010	Bread, pumpernickel
51404020	Bread, pumpernickel, toasted
51404500	Bagel, pumpernickel
51404550	Muffin, English, pumpernickel
51407010	Bread, black
51420000	Roll, rye
51421000	Roll, pumpernickel
51501010	Bread, oatmeal
51501020	Bread, oatmeal, toasted
51501040	Bread, oat bran
51501050	Bread, oat bran, toasted
51501080	Bagel, oat bran
51502010	Roll, oatmeal
51502100	Roll, oat bran
51503000	Muffin, English, oat bran
51601010	Bread, multigrain, toasted
51601020	Bread, multigrain
51601210	Bread, multigrain, with raisins
51601220	Bread, multigrain, with raisins, toasted
51602010	Bread, multigrain, reduced calorie and/or high fiber
51620000	Roll, multigrain
51630000	Bagel, multigrain
51630100	Bagel, multigrain, with raisins
51630200	Muffin, English, multigrain
51801010	Bread, barley
51804010	Bread, soy
51804020	Bread, soy, toasted
51805010	Bread, sunflower meal
51805020	Bread, sunflower meal, toasted
51806010	Bread, rice
51807000	Injera (American-style Ethiopian bread)
52101000	Biscuit, baking powder or buttermilk type, NS as to made from mix, refrigerated dough, or home recipe
52101030	Biscuit dough, fried
52101040	Crumpet
52101100	Biscuit, baking powder or buttermilk type, made from mix
52102040	Biscuit, baking powder or buttermilk type, made from refrigerated dough
52103000	Biscuit, baking powder or buttermilk type, commercially baked
52104010	Biscuit, baking powder or buttermilk type, made from home recipe
52104040	Biscuit, whole wheat
52104100	Biscuit, cheese

52104200	Biscuit, cinnamon-raisin
52105100	Scone
52105200	Scone, with fruit
52201000	Cornbread, prepared from mix
52202060	Cornbread, made from home recipe
52204000	Cornbread stuffing
52206010	Cornbread muffin, stick, round
52206060	Cornbread muffin, stick, round, made from home recipe
52207010	Corn flour patty or tart, fried
52208010	Corn pone, baked
52208750	Gordita/sope shell, plain, no filling, grilled, no fat added
52208760	Gordita/sope shell, plain, no filling, fried in oil
52209010	Hush puppy
52215000	Tortilla, NFS
52215100	Tortilla, corn
52215200	Tortilla, flour (wheat)
52215260	Tortilla, whole wheat
52215300	Taco shell, corn
52215350	Taco shell, flour
52220110	Cornmeal bread, Dominican style (Arepa Dominicana)
52301000	Muffin, NFS
52302010	Muffin, fruit and/or nuts
52302020	Muffin, fruit and/or nut, low fat
52302100	Muffin, fruit, fat free, cholesterol free
52302500	Muffin, chocolate chip
52302600	Muffin, chocolate
52302610	Muffin, chocolate, lowfat
52303010	Muffin, whole wheat
52303500	Muffin, wheat
52304010	Muffin, wheat bran
52304040	Muffin, bran with fruit, lowfat
52304060	Muffin, bran with fruit, no fat, no cholesterol
52304100	Muffin, oatmeal
52304150	Muffin, oat bran
52304200	Muffin, oat bran with fruit and/or nuts
52306010	Muffin, plain
52306300	Muffin, cheese
52306500	Muffin, pumpkin
52306550	Muffin, zucchini
52306700	Muffin, carrot
52308010	Matzo, fritters
52311010	Popover
52320110	Toaster muffin, fruit, toasted
52403000	Bread, nut
52404060	Bread, pumpkin
52405010	Bread, fruit, without nuts
52405100	Bread, fruit and nut
52406010	Bread, whole wheat, with nuts
52407000	Bread, zucchini
52408000	Bread, Irish soda
53100070	Cake batter, raw, not chocolate
53100100	Cake, NS as to type, with or without icing
53101100	Cake, angel food, without icing
53101200	Cake, angel food, with icing
53101250	Cake, angel food, with fruit and icing or filling
53101300	Cake, angel food, chocolate, without icing
53102000	Cake, applesauce, NS as to icing
53102100	Cake, applesauce, without icing

53102200	Cake, applesauce, with icing
53102300	Cake, applesauce, diet, without icing
53102600	Cake, banana, without icing
53102700	Cake, banana, with icing
53102800	Cake, black forest (chocolate-cherry)
53103000	Cake, Boston cream pie
53103550	Cake, butter, without icing
53103600	Cake, butter, with icing
53104000	Cake, carrot, NS as to icing
53104100	Cake, carrot, without icing
53104260	Cake, carrot, with icing
53104300	Cake, carrot, diet
53104400	Cake, coconut, with icing
53104500	Cheesecake
53104520	Cheesecake, diet
53104550	Cheesecake with fruit
53104570	Cheesecake, diet, with fruit
53104600	Cheesecake, chocolate
53105050	Cake, chocolate, devil's food, or fudge, made from home recipe or purchased ready-to-eat, NS as to icing
53105100	Cake, chocolate, devil's food, or fudge, standard-type mix (eggs and water added to dry mix), without icing or filling
53105160	Cake, chocolate, devil's food, or fudge, without icing or filling, made from home recipe or purchased ready-to-eat
53105200	Cake, chocolate, devil's food, or fudge, standard-type mix (eggs and water added to dry mix), with icing, coating, or filling
53105260	Cake, chocolate, devil's food, or fudge, with icing, coating, or filling, made from home recipe or purchased ready-to-eat
53105300	Cake, German chocolate, with icing and filling
53105500	Cake, chocolate, with icing, diet
53105600	Cake, chocolate, devil's food, or fudge, pudding-type mix, made by "Lite" recipe (eggs and water added to dry mix, no oil added to dry mix), with icing, coating, or filling
53105750	Cake, chocolate, devil's food, or fudge, pudding type mix, made by "cholesterol free" recipe (water, oil and egg whites added to dry mix), with "light" icing, coating or filling
53106000	Cake, chocolate, devil's food, or fudge, pudding-type mix (oil, eggs, and water added to dry mix), without icing or filling
53106500	Cake, cream, without icing or topping
53107000	Cake, cupcake, NS as to type or icing
53107200	Cake, cupcake, NS as to type, with icing
53108000	Cake, cupcake, chocolate, NS as to icing
53108100	Cake, cupcake, chocolate, without icing or filling
53108200	Cake, cupcake, chocolate, with icing or filling
53109100	Cake, cupcake, not chocolate, without icing or filling
53109200	Cake, cupcake, not chocolate, with icing or filling
53109210	Cake, cupcake, not chocolate, with icing or filling, lowfat, cholesterol free
53109250	Cake, cupcake, not chocolate, with fruit and cream filling
53109270	Cake, cupcake, chocolate, with or without icing, fruit filling or cream filling, lowfat, cholesterol free
53109300	Cake, Dobos Torte (non-chocolate layer cake with chocolate filling and icing)
53110000	Cake, fruit cake, light or dark, holiday type cake
53111000	Cake, gingerbread, without icing
53111500	Cake, graham cracker, without icing
53112000	Cake, ice cream and cake roll, chocolate
53112100	Cake, ice cream and cake roll, not chocolate
53113000	Cake, jelly roll
53114000	Cake, lemon, without icing
53114100	Cake, lemon, with icing
53114200	Cake, lemon, lowfat, without icing

53114250	Cake, lemon, lowfat, with icing
53115100	Cake, marble, without icing
53115200	Cake, marble, with icing
53115310	Cake, nut, without icing
53115320	Cake, nut, with icing
53115400	Cake, oatmeal, without icing
53115410	Cake, oatmeal, with icing
53115450	Cake, peanut butter, with icing
53115600	Cake, poppyseed, without icing
53116000	Cake, pound, without icing
53116020	Cake, pound, with icing
53116270	Cake, pound, chocolate
53116350	Cake, pound, Puerto Rican style (Ponque)
53116390	Cake, pound, reduced fat, cholesterol free
53116500	Cake, pumpkin, without icing
53116510	Cake, pumpkin, with icing
53116550	Cake, raisin-nut, without icing
53116560	Cake, raisin-nut, with icing
53117100	Cake, spice, without icing
53117200	Cake, spice, with icing
53118100	Cake, sponge, without icing
53118200	Cake, sponge, with icing
53118300	Cake, sponge, chocolate, without icing
53118350	Cake, sweetpotato, with icing
53118410	Cake, rum flavored, without icing (Sopa Borracha)
53118500	Cake, torte
53118550	Cake, tres leche
53119000	Cake, upside down (all fruits)
53120000	Cake, white, standard-type mix (egg whites and water added), NS as to icing
53120060	Cake, white, made from home recipe or purchased ready-to-eat, NS as to icing
53120100	Cake, white, standard-type mix (egg whites and water added to mix), without icing
53120160	Cake, white, without icing, made from home recipe or purchased ready-to-eat
53120200	Cake, white, standard-type mix (egg whites and water added to mix), with icing
53120260	Cake, white, with icing, made from home recipe or purchased ready-to-eat
53120330	Cake, white, pudding-type mix (oil, egg whites, and water added to dry mix), without icing
53120350	Cake, white, pudding-type mix (oil, egg whites, and water added to dry mix), with icing
53120400	Cake, white, eggless, lowfat
53120500	Cake, whole wheat, with fruit and nuts, without icing
53121060	Cake, yellow, made from home recipe or purchased ready-to-eat, NS as to icing
53121100	Cake, yellow, standard-type mix (eggs and water added to dry mix), without icing
53121160	Cake, yellow, without icing, made from home recipe or purchased ready-to-eat
53121200	Cake, yellow, standard-type mix (eggs and water added to dry mix), with icing
53121260	Cake, yellow, with icing, made from home recipe or purchased ready-to-eat
53121300	Cake, yellow, pudding-type mix (oil, eggs, and water added to dry mix), without icing
53121330	Cake, yellow, pudding-type mix (oil, eggs, and water added to dry mix), with icing
53122070	Cake, shortcake, biscuit type, with whipped cream and fruit
53122080	Cake, shortcake, biscuit type, with fruit
53123070	Cake, shortcake, sponge type, with whipped cream and fruit
53123080	Cake, shortcake, sponge type, with fruit
53123500	Cake, shortcake, with whipped topping and fruit, diet
53124110	Cake, zucchini, without icing
53124120	Cake, zucchini, with icing
53200100	Cookie, batter or dough, raw, not chocolate
53201000	Cookie, NFS
53202000	Cookie, almond
53203000	Cookie, applesauce
53203500	Cookie, biscotti (Italian sugar cookie)
53204000	Cookie, brownie, NS as to icing

53204010	Cookie, brownie, without icing
53204100	Cookie, brownie, with icing
53204500	Cookie, brownie, with cream cheese filling, without icing
53204600	Cookie, brownie, with peanut butter fudge icing
53204800	Cookie, brownie, diet, NS as to icing
53204830	Cookie, brownie, lowfat, with icing
53204840	Cookie, brownie, lowfat, without icing
53204850	Cookie, brownie, fat free, cholesterol free, with icing
53204860	Cookie, brownie, fat free, without icing
53205250	Cookie, butterscotch, brownie
53205500	Cookie, butterscotch chip
53205600	Cookie, caramel coated, with nuts
53206000	Cookie, chocolate chip
53206010	Cookie, chocolate chip, with raisins
53206020	Cookie, chocolate chip, made from home recipe or purchased at a bakery
53206030	Cookie, chocolate chip, reduced fat
53206050	Cookie, rich, chocolate chip, with chocolate filling
53206100	Cookie, chocolate chip sandwich
53206500	Cookie, chocolate, made with rice cereal
53206550	Cookie, chocolate, made with oatmeal and coconut (no-bake)
53207000	Cookie, chocolate fudge, with/without nuts
53207050	Cookie, chocolate, with chocolate filling or coating, fat free
53208000	Cookie, chocolate-covered marshmallow
53208200	Cookie, marshmallow pie, chocolate covered
53209000	Cookie, chocolate, chocolate sandwich or chocolate-coated or striped
53209010	Cookie, chocolate-covered, sugar wafer, creme- or caramel-filled
53209020	Cookie, chocolate sandwich, reduced fat
53209050	Cookie, chocolate-covered, chocolate sandwich
53209100	Cookie, chocolate, sandwich, with extra filling
53209500	Cookie, chocolate and vanilla sandwich
53210000	Cookie, chocolate wafer
53210900	Cookie, graham cracker sandwich with chocolate and marshmallow filling
53210910	Cookie, graham cracker with marshmallow
53211000	Cookie bar, with chocolate, nuts, and graham crackers
53215500	Cookie, coconut
53216000	Cookie, coconut and nut
53220000	Cookie, fruit-filled bar
53220010	Cookie, fruit-filled bar, fat free
53220020	Cookie, date bar
53220030	Cookie, fig bar
53220040	Cookie, fig bar, fat free
53222010	Cookie, fortune
53222020	Cookie, cone shell, ice cream type, wafer or cake
53222100	Cookie, cone shell, ice cream type, brown sugar
53223000	Cookie, gingersnaps
53223100	Cookie, granola
53224000	Cookie, ladyfinger
53224250	Cookie, lemon bar
53225000	Cookie, macaroon, coconut-meringue type, no flour
53226000	Cookie, marshmallow, with coconut
53226500	Cookie, marshmallow, with rice cereal (no-bake)
53226550	Cookie, marshmallow, with rice cereal and chocolate chips
53226600	Cookie, marshmallow and peanut butter, with oat cereal (no-bake)
53227000	Cookie, marshmallow pies, non-chocolate coating
53228000	Cookie, meringue
53230000	Cookie, molasses
53231000	Cookie, Lebkuchen
53231400	Cookie, multigrain, high fiber

53233000	Cookie, oatmeal
53233010	Cookie, oatmeal, with raisins
53233020	Cookie, oatmeal, with fruit filling
53233030	Cookie, oatmeal, fat free, with raisins
53233040	Cookie, oatmeal, reduced fat, with raisins
53233050	Cookie, oatmeal sandwich, with creme filling
53233060	Cookie, oatmeal, with chocolate chips
53233080	Cookie, oatmeal sandwich, with peanut butter and jelly filling
53233100	Cookie, oatmeal, with chocolate and peanut butter (no-bake)
53233500	Cookie, oat bran
53234000	Cookie, peanut butter
53234010	Cookie, peanut butter, with oatmeal
53234100	Cookie, peanut butter, with chocolate
53234250	Cookie, peanut butter with rice cereal (no-bake)
53235000	Cookie, peanut
53235500	Cookie, with peanut butter filling, chocolate-coated
53236000	Cookie, pizzelle (Italian style wafer)
53236100	Cookie, pumpkin
53237000	Cookie, raisin
53237010	Cookie, raisin sandwich, cream-filled
53237500	Cookie, rum ball (no-bake)
53238000	Cookie, sandwich-type, not chocolate or vanilla
53239000	Cookie, shortbread
53239010	Cookie, shortbread, reduced fat
53239050	Cookie, shortbread, with chocolate filling
53241500	Cookie, butter or sugar cookie
53241600	Cookie, butter or sugar cookie, with fruit and/or nuts
53242000	Cookie, sugar wafer
53242500	Cookie, toffee bar
53243000	Cookie, vanilla sandwich
53243050	Cookie, vanilla sandwich, reduced fat
53243100	Cookie, rich, all chocolate, with chocolate filling or chocolate chips
53244010	Cookie, butter or sugar, with chocolate icing or filling
53244020	Cookie, butter or sugar, with icing or filling other than chocolate
53245000	Cookie, vanilla waffle creme
53246000	Cookie, tea, Japanese
53247000	Cookie, vanilla wafer
53247050	Cookie, vanilla wafer, reduced fat
53247500	Cookie, vanilla with caramel, coconut, and chocolate coating
53251100	Cookie, rugelach
53260030	Cookie, dietetic, chocolate chip
53260150	Cookie, lemon wafer, lowfat
53260200	Cookie, dietetic, oatmeal with raisins
53260300	Cookie, dietetic, sandwich type
53260400	Cookie, dietetic, sugar or plain
53270100	Cookies, Puerto Rican (Mantecaditos polvorones)
53300100	Pie, NFS
53300170	Pie, individual size or tart, NFS
53301000	Pie, apple, two crust
53301070	Pie, apple, individual size or tart
53301080	Pie, apple, fried pie
53301500	Pie, apple, one crust
53301750	Pie, apple, diet
53302000	Pie, apricot, two crust
53302070	Pie, apricot, individual size or tart
53303000	Pie, blackberry, two crust
53303070	Pie, blackberry, individual size or tart
53303500	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry; two

	crust
53303510	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry; one crust
53303570	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry, individual size or tart
53304000	Pie, blueberry, two crust
53304050	Pie, blueberry, one crust
53304070	Pie, blueberry, individual size or tart
53305000	Pie, cherry, two crust
53305010	Pie, cherry, one crust
53305070	Pie, cherry, individual size or tart
53305080	Pie, cherry, fried pie
53305700	Pie, lemon (not cream or meringue)
53305720	Pie, lemon (not cream or meringue), individual size or tart
53306000	Pie, mince, two crust
53306070	Pie, mince, individual size or tart
53307000	Pie, peach, two crust
53307050	Pie, peach, one crust
53307070	Pie, peach, individual size or tart
53307080	Pie, peach, fried pie
53307500	Pie, pear, two crust
53308000	Pie, pineapple, two crust
53308070	Pie, pineapple, individual size or tart
53308500	Pie, prune, one crust
53309000	Pie, raisin, two crust
53310000	Pie, raspberry, one crust
53310050	Pie, raspberry, two crust
53311000	Pie, rhubarb, two crust
53311050	Pie, rhubarb, one crust
53312000	Pie, strawberry, one crust
53313000	Pie, strawberry-rhubarb, two crust
53314000	Pie, strawberry, individual size or tart
53340500	Pie, cherry, made with cream cheese and sour cream
53341000	Pie, banana cream
53341500	Pie, buttermilk
53341750	Pie, chess
53342000	Pie, chocolate cream
53342070	Pie, chocolate cream, individual size or tart
53343000	Pie, coconut cream
53343070	Pie, coconut cream, individual size or tart
53344000	Pie, custard
53344200	Mixed fruit tart filled with custard or cream cheese
53345000	Pie, lemon cream
53345070	Pie, lemon cream, individual size or tart
53346000	Pie, peanut butter cream
53346500	Pie, pineapple cream
53347000	Pie, pumpkin
53347070	Pie, pumpkin, individual size or tart
53347100	Pie, raspberry cream
53347600	Pie, squash
53348000	Pie, strawberry cream
53360000	Pie, sweetpotato
53365000	Pie, vanilla cream
53366000	Pie, yogurt, frozen
53370000	Pie, chiffon, not chocolate
53381000	Pie, lemon meringue
53382000	Pie, chocolate-marshmallow
53385000	Pie, pecan

53385070	Pie, pecan, individual size or tart
53385500	Pie, oatmeal
53386000	Pie, pudding, flavors other than chocolate
53386050	Pie, pudding, flavors other than chocolate, individual size or tart
53386250	Pie, pudding, chocolate, with chocolate coating, individual size
53387000	Pie, Toll house chocolate chip
53390000	Pie, shoo-fly
53391000	Pie shell
53400200	Blintz, cheese-filled
53400300	Blintz, fruit-filled
53410100	Cobbler, apple
53410300	Cobbler, berry
53410500	Cobbler, cherry
53410800	Cobbler, peach
53410850	Cobbler, pear
53410860	Cobbler, pineapple
53410900	Cobbler, rhubarb
53415100	Crisp, apple, apple dessert
53415120	Fritter, apple
53415200	Fritter, banana
53415300	Crisp, blueberry
53415400	Crisp, cherry
53415500	Crisp, peach
53415600	Crisp, rhubarb
53420000	Cream puff, eclair, custard or cream filled, NS as to icing
53420100	Cream puff, eclair, custard or cream filled, not iced
53420200	Cream puff, eclair, custard or cream filled, iced
53420210	Cream puff, eclair, custard or cream filled, iced, reduced fat
53420250	Cream puff, no filling or icing
53420300	Air filled fritter or fried puff, without syrup, Puerto Rican style (Bunuelos de viento)
53420400	Sopaipilla, without syrup or honey
53420410	Sopaipilla with syrup or honey
53430100	Crepe, dessert type, chocolate-filled
53430200	Crepe, dessert type, fruit-filled
53430250	Crepe suzette
53430750	Tamale, sweet, with fruit
53440000	Strudel, apple
53440300	Strudel, berry
53440500	Strudel, cherry
53440600	Strudel, cheese
53440800	Strudel, cheese and fruit
53441110	Baklava
53441210	Basbousa (semolina dessert dish)
53450000	Turnover or dumpling, apple
53450300	Turnover or dumpling, berry
53450500	Turnover or dumpling, cherry
53450800	Turnover or dumpling, lemon
53451000	Turnover or dumpling, peach
53451750	Turnover, pumpkin
53452100	Pastry, fruit-filled
53452170	Pastry, cookie type, fried
53452200	Pastry, Italian, with cheese
53452400	Pastry, puff
53452420	Pastry, puff, custard or cream filled, iced or not iced
53452450	Cheese pastry puffs
53452500	Pastry, mainly flour and water, fried
53453150	Empanada, Mexican turnover, fruit-filled
53453170	Empanada, Mexican turnover, pumpkin



53500100	Breakfast pastry, NFS
53510000	Danish pastry, plain or spice
53510100	Danish pastry, with fruit
53510200	Danish pastry, with nuts
53511000	Danish pastry, with cheese
53511500	Danish pastry, with cheese, fat free, cholesterol free
53520000	Doughnut, NS as to cake or yeast
53520110	Doughnut, cake type
53520120	Doughnut, chocolate, cake type
53520140	Doughnut, cake type, chocolate covered
53520150	Doughnut, cake type, chocolate covered, dipped in peanuts
53520160	Doughnut, chocolate, cake type, with chocolate icing
53520200	Churros
53520600	Cruller, NFS
53520700	French cruller
53521100	Doughnut, chocolate, raised or yeast, with chocolate icing
53521110	Doughnut, raised or yeast
53521120	Doughnut, chocolate, raised or yeast
53521130	Doughnut, raised or yeast, chocolate covered
53521140	Doughnut, jelly
53521210	Doughnut, custard-filled
53521220	Doughnut, chocolate cream-filled
53521230	Doughnut, custard-filled, with icing
53521250	Doughnut, wheat
53521300	Doughnut, wheat, chocolate covered
53530000	Breakfast tart
53530010	Breakfast tart, lowfat
53540000	Breakfast bar, NFS
53540200	Breakfast bar, cereal crust with fruit filling, lowfat
53540250	Breakfast bar, cereal crust with fruit filling, fat free
53540300	Fiber One Chewy Bar
53540400	Kellogg's Nutri-Grain Cereal Bar
53540402	Kellogg's Nutri-Grain Yogurt Bar
53540404	Kellogg's Nutri-Grain Fruit and Nut Bar
53540500	Breakfast bar, date, with yogurt coating
53540600	Milk 'n Cereal bar
53540700	Kellogg's Special K bar
53540800	Kashi GOLEAN Chewy Bars
53540802	Kashi TLC Chewy Granola Bar
53540804	Kashi GOLEAN Crunchy Bars
53542000	Snack bar, oatmeal
53542100	Granola bar, oats, sugar, raisins, coconut
53542200	Granola bar, oats, fruit and nuts, lowfat
53542210	Granola bar, nonfat
53543000	Granola bar, oats, reduced sugar
53543100	Granola bar, peanuts, oats, sugar, wheat germ
53544200	Granola bar, chocolate-coated
53544210	Granola bar, with coconut, chocolate-coated
53544220	Granola bar with nuts, chocolate-coated
53544230	Granola bar, oats, nuts, coated with non-chocolate coating
53544250	Granola bar, coated with non-chocolate coating
53544300	Granola bar, high fiber, coated with non-chocolate yogurt coating
53544400	Granola bar, with rice cereal
53544410	Quaker Granola Bites
53610000	Coffee cake, NFS
53610100	Coffee cake, crumb or quick-bread type
53610120	Coffee cake, crumb or quick-bread type, reduced fat, cholesterol free
53610170	Coffee cake, crumb or quick-bread type, with fruit

53610200	Coffee cake, crumb or quick-bread type, cheese-filled
54001000	Crackers, NS as to sweet or nonsweet
54101010	Cracker, animal
54102010	Crackers, graham
54102020	Crackers, graham, chocolate covered
54102050	Crackers, oatmeal
54102060	Crackers, Cuban
54102100	Crackers, graham, lowfat
54102110	Crackers, graham, fat free
54102200	Crackers, graham, sandwich-type, with filling
54201010	Crackers, matzo, low sodium
54202010	Crackers, saltine, low sodium
54202050	Crackers, saltine, fat free, low sodium
54203010	Crackers, toast thins (rye, wheat, white flour), low sodium
54204010	Cracker, 100% whole wheat, low sodium
54205010	Cracker, snack, low sodium
54205030	Cracker, cheese, low sodium
54205100	Cracker, snack, lowfat, low sodium
54210010	Cracker, multigrain, salt free
54301000	Cracker, snack
54301100	Cracker, snack, reduced fat
54301200	Cracker, snack, fat free
54304000	Cracker, cheese
54304100	Cracker, cheese, reduced fat
54304500	Cracker, high fiber, no added fat
54305000	Crispbread, wheat, no added fat
54305500	Crispbread, wheat or rye, extra crispy
54307000	Crackers, matzo
54308000	Crackers, milk
54309000	Crackers, oat
54313000	Crackers, oyster
54318500	Rice cake, cracker-type
54319000	Crackers, rice
54319010	Puffed rice cake
54319020	Popcorn cake
54322000	Crispbread, rye, no added fat
54325000	Crackers, saltine
54325050	Crackers, saltine, whole wheat
54327950	Crackers, cylindrical, peanut-butter filled
54328000	Crackers, sandwich-type, NFS
54328100	Cracker, sandwich-type, peanut butter filled
54328110	Cracker, sandwich-type, peanut butter filled, reduced fat
54328200	Cracker, sandwich-type, cheese-filled
54334000	Crackers, toast thins (rye, pumpernickel, white flour)
54336000	Crackers, water biscuits
54337000	Cracker, 100% whole wheat
54337050	Cracker, 100% whole wheat, reduced fat
54337100	Crackers, whole wheat and bran
54338000	Crackers, wheat
54338100	Crackers, wheat, reduced fat
54402200	Salty snack mixture, mostly corn or cornmeal based, with pretzels, without nuts*
54402700	Pita chips
54408000	Pretzels, NFS
54408010	Pretzels, hard
54408020	Pretzels, soft
54408030	Pretzel, hard, unsalted
54408040	Pretzels, soft, unsalted
54408200	Pretzel, hard, chocolate-coated*

54408250	Pretzel, yogurt-covered*
54408300	Pretzels, cheese-filled
54420010	Multigrain mixture, pretzels, cereal and/or crackers, nuts*
54420200	Multigrain mixture, bread sticks, sesame nuggets, pretzels, rye chips
54440010	Bagel chip
55101000	Pancakes, plain
55101010	Pancakes, reduced calorie, high fiber
55101020	Pancakes, plain, fat free
55103000	Pancakes, with fruit
55103100	Pancakes, with chocolate chips
55105000	Pancakes, buckwheat
55105100	Pancakes, cornmeal
55105200	Pancakes, whole wheat
55105300	Pancakes, sour dough
55201000	Waffle, plain
55202000	Waffle, wheat, bran, or multigrain
55203000	Waffle, fruit
55203500	Waffle, nut and honey
55203600	Waffle, chocolate chip
55204000	Waffle, cornmeal
55205000	Waffle, 100% whole wheat or 100% whole grain
55206000	Waffle, oat bran
55211000	Waffle, plain, fat free
55211050	Waffle, plain, lowfat
55301000	French toast, plain
55301050	French toast sticks, plain
55401000	Crepe, plain
55501000	Flour and water patty
55702000	Cake or pancake made with rice flour and/or dried beans
55703000	Cake made with glutinous rice and dried beans
55801000	Funnel cake
58100100	Burrito with beef, no beans*
58100110	Burrito with beef and beans*
58100120	Burrito with beef, beans, and cheese*
58100130	Burrito with beef and cheese, no beans*
58100140	Burrito with beef, beans, cheese, and sour cream*
58100150	Burrito with beef and potato, no beans*
58100155	Burrito with beef, rice, and cheese*
58100160	Burrito with beef, beans, rice, and cheese*
58100180	Burrito with pork and beans*
58100200	Burrito with chicken, no beans*
58100210	Burrito with chicken and beans*
58100220	Burrito with chicken, beans, and cheese*
58100230	Burrito with chicken and cheese*
58100240	Burrito with chicken, NFS*
58100245	Burrito with chicken, beans, cheese, and sour cream*
58100250	Burrito with chicken, rice, and cheese*
58100255	Burrito with chicken, beans, rice, and cheese*
58100300	Burrito with beans and rice, meatless*
58100310	Burrito with beans, meatless*
58100320	Burrito with beans and cheese, meatless*
58100330	Burrito with rice, beans, cheese, sour cream, lettuce, tomato and guacamole, meatless*
58100340	Burrito with eggs, sausage, cheese and vegetables*
58100350	Burrito with eggs and cheese, no beans*
58100410	Burrito with beef, cheese, and sour cream*
58101350	Soft taco with beef, cheese, lettuce, tomato and sour cream*
58101400	Soft taco with beef, cheese, and lettuce*
58101450	Soft taco with chicken, cheese, and lettuce*

58101460	Soft taco with chicken, cheese, lettuce, tomato and sour cream*
58101530	Soft taco with beef, cheese, lettuce, tomato and salsa*
58101930	Taco or tostada salad with beef, beans and cheese, fried flour tortilla*
58101940	Taco or tostada salad, meatless, with cheese, fried flour tortilla*
58104260	Chalupa with beans, cheese, lettuce and tomato*
58104280	Chalupa with beef, cheese, lettuce, tomato and sour cream*
58104290	Chalupa with beef, cheese, lettuce, tomato and salsa*
58104310	Chalupa with beans, chicken, cheese, lettuce and tomato*
58104320	Chalupa with chicken, cheese, lettuce, tomato and sour cream*
58104340	Chalupa with chicken, cheese, lettuce, tomato and salsa*
58104450	Chimichanga with beef and tomato*
58104500	Chimichanga with beef, beans, lettuce and tomato*
58104510	Chimichanga with beef, cheese, lettuce and tomato*
58104520	Chimichanga with beans and cheese, meatless, with lettuce and tomato*
58104530	Chimichanga with chicken and cheese*
58104550	Chimichanga with chicken, sour cream, lettuce and tomato, no cheese*
58104600	Chimichanga with beef and rice*
58104710	Quesadilla with cheese, meatless*
58104730	Quesadilla with meat and cheese*
58104740	Quesadilla with poultry and cheese*
58105000	Fajita with chicken and vegetables*
58105050	Fajita with beef and vegetables*
58123120	Sweet bread dough, filled with bean paste, meatless, steamed*
58127210	Croissant sandwich, filled with ham and cheese*
58127270	Croissant sandwich with sausage and egg*
58127290	Croissant sandwich with bacon and egg*
58127310	Croissant sandwich with ham, egg, and cheese*
58127330	Croissant sandwich with sausage, egg, and cheese*
58127350	Croissant sandwich with bacon, egg, and cheese*
58127500	Vegetable submarine sandwich*
58200100	Wrap sandwich, filled with meat, poultry, or fish, vegetables, and rice*
58200250	Wrap sandwich, filled with vegetables*
58200300	Wrap sandwich, filled with meat, poultry, or fish, vegetables, rice, and cheese*
58310210	Sausage and french toast (frozen meal)*

#### **Pastas**

Food Code	Food Description
27212000	Beef and noodles, no sauce (mixture)*
27212050	Beef and macaroni with cheese sauce (mixture)*
27212100	Beef and noodles with tomato-based sauce (mixture)*
27212120	Chili con carne with beans and macaroni*
27212150	Beef goulash with noodles*
27212200	Beef and noodles with gravy (mixture)*
27212300	Beef and noodles with cream or white sauce (mixture)*
27212350	Beef stroganoff with noodles*
27212400	Beef and noodles with (mushroom) soup (mixture)*
27213120	Porcupine balls with tomato-based sauce (mixture)*
27220020	Ham and noodles with cream or white sauce (mixture)*
27220190	Sausage and noodles with cream or white sauce (mixture)*
27220210	Ham and noodles, no sauce (mixture)*
27236000	Venison/deer and noodles with cream or white sauce (mixture)*
27242000	Chicken or turkey and noodles, no sauce (mixture)*
27242200	Chicken or turkey and noodles with gravy (mixture)*
27242250	Chicken or turkey and noodles with (mushroom) soup (mixture)*
27242300	Chicken or turkey and noodles with cream or white sauce (mixture)*
27242310	Chicken or turkey and noodles with cheese sauce (mixture)*
27242350	Chicken or turkey tetrazzini*
27242400	Chicken or turkey and noodles, tomato-based sauce (mixture)*
27250110	Scallops and noodles with cheese sauce (mixture)*

27250120	Shrimp and noodles, no sauce (mixture)*
27250126	Shrimp and noodles with cream or white sauce (mixture)*
27250130	Shrimp and noodles with cheese sauce (mixture)*
27250132	Shrimp and noodles with tomato sauce (mixture)*
27250610	Tuna noodle casserole with cream or white sauce*
27250630	Tuna noodle casserole with (mushroom) soup*
27250900	Fish and noodles with (mushroom) soup*
27250950	Shellfish mixture and noodles, tomato-based sauce (mixture)*
27313010	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), no sauce (mixture)*
27313020	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), no sauce (mixture)*
27313110	Beef chow mein or chop suey with noodles*
27313150	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based sauce (mixture)*
27313160	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), soy-based sauce (mixture)*
27313210	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27313220	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27313310	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), (mushroom) soup (mixture)*
27313320	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), (mushroom) soup (mixture)*
27313410	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27313420	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27320030	Ham or pork, noodles and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)*
27320070	Ham or pork, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27320080	Sausage, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce*
27320310	Pork chow mein or chop suey with noodles*
27336310	Venison/deer, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27343010	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), no sauce (mixture)*
27343020	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), no sauce (mixture)*
27343410	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27343420	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27343470	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), cream sauce, white sauce, or mushroom soup-based sauce (mixture)*
27343480	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and/or dark-green leafy), cream sauce, white sauce, or mushroom soup-based sauce (mixture)*
27343510	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27343520	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27343910	Chicken or turkey chow mein or chop suey with noodles*
27343950	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), cheese sauce (mixture)*
27343960	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy),

	cheese sauce (mixture)*
27350050	Shrimp chow mein or chop suey with noodles*
27350080	Tuna noodle casserole with vegetables, cream or white sauce*
27350410	Tuna noodle casserole with vegetables and (mushroom) soup*
27360080	Chow mein or chop suey, NS as to type of meat, with noodles*
27360120	Chow mein or chop suey, various types of meat, with noodles*
27446355	Oriental chicken or turkey garden salad with crispy noodles (chicken and/or turkey, lettuce, fruit, nuts, crispy noodles), no dressing*
28110370	Salisbury steak with gravy, macaroni and cheese, vegetable (frozen meal)*
28110380	Salisbury steak with gravy, macaroni and cheese (frozen meal)*
28110640	Meatballs, Swedish, in sauce, with noodles (frozen meal)*
28110660	Meatballs, Swedish, in gravy, with noodles (diet frozen meal)*
28133110	Veal, breaded, with spaghetti, in tomato sauce (frozen meal)*
28140320	Chicken and noodles with vegetable, dessert (frozen meal)*
28140730	Chicken patty, breaded, with tomato sauce and cheese, fettuccine alfredo, vegetable (frozen meal)*
28140740	Chicken patty, or nuggets, boneless, breaded, with pasta and tomato sauce, fruit, dessert (frozen meal)*
28143080	Chicken with noodles and cheese sauce (diet frozen meal)*
28143110	Chicken cacciatore with noodles (diet frozen meal)*
28143130	Chicken and vegetable entree with noodles (frozen meal)*
28143150	Chicken and vegetable entree with noodles (diet frozen meal)*
28143170	Chicken in cream sauce with noodles and vegetable (frozen meal)*
28144100	Chicken and vegetable entree with noodles and cream sauce (frozen meal)*
28145710	Turkey tetrazzini (frozen meal)*
28150510	Fish in lemon-butter sauce with starch item, vegetable (frozen meal)*
28150650	Fish, breaded, or fish sticks, with pasta, vegetable and dessert (frozen meal)*
28153010	Shrimp and clams in tomato-based sauce, with noodles (frozen meal)*
28154010	Shrimp and vegetables in sauce with noodles (diet frozen meal)*
28160650	Stuffed green pepper (frozen meal)*
28160710	Stuffed cabbage, with meat and tomato sauce (diet frozen meal)*
28310230	Meatball soup, Mexican style (Sopa de Albondigas)*
28310320	Beef noodle soup, Puerto Rican style (Sopa de carne y fideos)*
28315120	Beef vegetable soup with noodless, stew type, chunky style*
28315160	Italian Wedding Soup*
28320120	Pork vegetable soup with noodles, stew type, chunky style*
28320140	Ham, noodle, and vegetable soup, Puerto Rican style*
28331110	Lamb, pasta, and vegetable soup, Puerto Rican style*
28340220	Chicken soup with noodles and potatoes, Puerto Rican style*
28340590	Chicken corn soup with noodles, home recipe*
28340640	Chicken vegetable soup with noodles, stew type, chunky style*
28355440	Shrimp gumbo*
41601060	Bean soup, with macaroni and meat*
41601090	Bean soup, with macaroni*
41610100	White bean soup, Puerto Rican style (Sopon de habichuelas blancas)*
56101000	Macaroni, cooked, NS as to fat added in cooking
56101010	Macaroni, cooked, fat not added in cooking
56101030	Macaroni, cooked, fat added in cooking
56102000	Macaroni, whole wheat, cooked, NS as to fat added in cooking
56102010	Macaroni, whole wheat, cooked, fat not added in cooking
56102020	Macaroni, whole wheat, cooked, fat added in cooking
56104000	Macaroni, cooked, vegetable, NS as to fat added in cooking
56104010	Macaroni, cooked, vegetable, fat not added in cooking
56104020	Macaroni, cooked, vegetable, fat added in cooking
56112000	Noodles, cooked, NS as to fat added in cooking
56112010	Noodles, cooked, fat not added in cooking
56112030	Noodles, cooked, fat added in cooking
56113000	Noodles, cooked, whole wheat, NS as to fat added in cooking*

56113010	Noodles, cooked, whole wheat, fat not added in cooking
56113990	Noodles, cooked, spinach, NS as to fat added in cooking
56114000	Noodles, cooked, spinach, fat not added in cooking
56114020	Noodles, cooked, spinach, fat added in cooking
56116000	Noodles, chow mein
56130000	Spaghetti, cooked, NS as to fat added in cooking
56130010	Spaghetti, cooked, fat not added in cooking
56131000	Spaghetti, cooked, fat added in cooking
56132990	Spaghetti, cooked, whole wheat, NS as to fat added in cooking
56133000	Spaghetti, cooked, whole wheat, fat not added in cooking
56133010	Spaghetti, cooked, whole wheat, fat added in cooking
58130011	Lasagna with meat*
58130013	Lasagna with meat, canned*
58130020	Lasagna with meat and spinach*
58130140	Lasagna with chicken or turkey*
58130150	Lasagna, with chicken or turkey, and spinach*
58130310	Lasagna, meatless*
58130320	Lasagna, meatless, with vegetables*
58131110	Ravioli, NS as to filling, with tomato sauce*
58131310	Ravioli, meat-filled, no sauce*
58131320	Ravioli, meat-filled, with tomato sauce or meat sauce*
58131323	Ravioli, meat-filled, with tomato sauce or meat sauce, canned*
58131510	Ravioli, cheese-filled, no sauce*
58131520	Ravioli, cheese-filled, with tomato sauce*
58131523	Ravioli, cheese-filled, with tomato sauce, canned*
58131530	Ravioli, cheese-filled, with meat sauce*
58131535	Ravioli, cheese-filled, with cream sauce*
58131600	Ravioli, cheese and spinach-filled, with cream sauce*
58131610	Ravioli, cheese and spinach filled, with tomato sauce*
58132110	Spaghetti with tomato sauce, meatless*
58132113	Pasta with tomato sauce and cheese, canned
58132310	Spaghetti with tomato sauce and meatballs or spaghetti with meat sauce or spaghetti with meat sauce and meatballs*
58132313	Pasta with tomato sauce and meat or meatballs, canned
58132340	Spaghetti with tomato sauce and vegetables*
58132350	Spaghetti with tomato sauce, meatless, whole wheat noodles*
58132360	Spaghetti with tomato sauce and meatballs, whole wheat noodles or spaghetti with meat sauce, whole wheat noodles or spaghetti with meat sauce and meatballs, whole wheat noodles*
58132450	Spaghetti with tomato sauce, meatless, made with spinach noodles*
58132460	Spaghetti with tomato sauce and meatballs made with spinach noodles, or spaghetti with meat sauce made with spinach noodles, or spaghetti with meat sauce and meatballs made with spinach noodles*
58132710	Spaghetti with tomato sauce and frankfurters or hot dogs*
58132713	Pasta with tomato sauce and frankfurters or hot dogs, canned
58132800	Spaghetti with clam sauce, NS as to red or white*
58132810	Spaghetti with red clam sauce*
58132820	Spaghetti with white clam sauce*
58132910	Spaghetti with tomato sauce and chicken or turkey*
58133120	Manicotti, cheese-filled, with tomato sauce, meatless*
58133130	Manicotti, cheese-filled, with meat sauce*
58133140	Manicotti, vegetable- and cheese-filled, with tomato sauce, meatless*
58134110	Stuffed shells, cheese-filled, no sauce*
58134120	Stuffed shells, cheese-filled, with tomato sauce, meatless*
58134130	Stuffed shells, cheese-filled, with meat sauce*
58134160	Stuffed shells, cheese- and spinach- filled, no sauce*
58134210	Stuffed shells, with chicken, with tomato sauce*
58134610	Tortellini, meat-filled, with tomato sauce*
58134620	Tortellini, cheese-filled, meatless, with tomato sauce*

58134623	Tortellini, cheese-filled, meatless, with tomato sauce, canned*
58134640	Tortellini, cheese-filled, meatless, with vinaigrette dressing*
58134650	Tortellini, meat-filled, no sauce*
58134660	Tortellini, cheese-filled, with cream sauce*
58134680	Tortellini, cheese-filled, no sauce*
58134710	Tortellini, spinach-filled, with tomato sauce*
58134720	Tortellini, spinach-filled, no sauce*
58134810	Cannelloni, cheese- and spinach-filled, no sauce*
58135110	Chow fun noodles with meat and vegetables*
58135120	Chow fun noodles with vegetables, meatless*
58136120	Lo mein, meatless*
58136130	Lo mein, with shrimp*
58136140	Lo mein, with pork*
58136150	Lo mein, with beef*
58136160	Lo mein, with chicken*
58137210	Pad Thai, NFS*
58137220	Pad Thai, meatless*
58137230	Pad Thai with chicken*
58137240	Pad Thai with seafood*
58137250	Pad Thai with meat*
58145110	Macaroni or noodles with cheese*
58145113	Macaroni or noodles with cheese, canned
58145114	Macaroni or noodles with cheese, made from dry mix*
58145115	Macaroni or noodles with cheese, from boxed mix with already prepared cheese sauce*
58145120	Macaroni or noodles with cheese and tuna*
58145130	Macaroni or noodles with cheese and beef*
58145140	Macaroni or noodles with cheese and tomato*
58145150	Macaroni or noodles with cheese and pork or ham*
58145160	Macaroni or noodles with cheese and frankfurters or hot dogs*
58145170	Macaroni and cheese with egg*
58145190	Macaroni or noodles with cheese and chicken or turkey*
58146100	Pasta with tomato sauce, meatless*
58146110	Pasta with meat sauce*
58146120	Pasta with cheese and meat sauce*
58146130	Pasta with carbonara sauce*
58146150	Pasta with cheese and tomato sauce, meatless*
58146160	Pasta with vegetables, no sauce or dressing*
58146200	Pasta, meat-filled, with gravy, canned*
58146310	Pasta, whole wheat, with tomato sauce, meatless*
58147100	Pasta with pesto sauce*
58147110	Macaroni or noodles with beans or lentils and tomato sauce*
58147310	Macaroni, creamed*
58147330	Macaroni, creamed, with cheese*
58147350	Macaroni, creamed, with vegetables*
58147510	Flavored pasta*
58148110	Macaroni or pasta salad*
58148120	Macaroni or pasta salad with egg*
58148130	Macaroni or pasta salad with tuna*
58148140	Macaroni or pasta salad with crab meat*
58148150	Macaroni or pasta salad with shrimp*
58148160	Macaroni or pasta salad with tuna and egg*
58148170	Macaroni or pasta salad with chicken*
58148180	Macaroni or pasta salad with cheese*
58148500	Pasta or macaroni salad with oil and vinegar-type dressing*
58148550	Pasta or macaroni salad with meat*
58149110	Noodle pudding*
58149160	Noodle pudding, with milk*
58301020	Lasagna with cheese and sauce (diet frozen meal)



58301030	Veal lasagna (diet frozen meal)
58301050	Lasagna with cheese and meat sauce (diet frozen meal)
58301110	Vegetable lasagna (frozen meal)
58301150	Zucchini lasagna (diet frozen meal)
58302000	Macaroni and cheese (diet frozen meal)
58302050	Beef and noodles with meat sauce and cheese (diet frozen meal)
58302060	Spaghetti or noodles with beef in tomato-based sauce, lowfat, reduced sodium (diet frozen meal)
58302080	Noodles with vegetables in tomato-based sauce (diet frozen meal)
58304010	Spaghetti and meatballs dinner, NFS (frozen meal)
58304050	Spaghetti with meat and mushroom sauce (diet frozen meal)
58304060	Spaghetti with meat sauce (diet frozen meal)
58304200	Ravioli, cheese-filled, with tomato sauce (diet frozen meal)
58304220	Rigatoni with meat sauce and cheese (diet frozen meal)
58304230	Ravioli, cheese-filled, with vegetable and fruit (frozen meal)*
58304250	Manicotti, cheese-filled, with tomato sauce (diet frozen meal)
58304400	Linguini with vegetables and seafood in white wine sauce (diet frozen meal)
58305250	Pasta with vegetable and cheese sauce (diet frozen meal)
58306010	Beef enchilada dinner, NFS (frozen meal)*
58402100	Beef noodle soup, home recipe*
58403040	Chicken noodle soup, home recipe*
58403060	Chicken noodle soup, canned, reduced sodium, ready-to-serve*
58403100	Noodle and potato soup, Puerto Rican style*
58406020	Turkey noodle soup, home recipe*
58407050	Instant soup, noodle with egg, shrimp or chicken*
58408500	Noodle soup with vegetables, Oriental style*
58409000	Noodle soup, with fish ball, shrimp, and dark green leafy vegetable*
58421000	Sopa seca (dry soup), Mexican style, NFS*
58421010	Sopa Seca de Fideo, Mexican style, made with dry noodles*
58421020	Sopa de Fideo Aguada, Mexican style noodle soup*
71802010	Macaroni and potato soup*
72202010	Broccoli casserole (broccoli, noodles, and cream sauce)*
74604500	Tomato noodle soup, prepared with water*
74604600	Tomato noodle soup, cream of*
75340160	Vegetable and pasta combinations with cream or cheese sauce (broccoli, pasta, carrots, corn, zucchini, peppers, cauliflower, peas, etc.), cooked*
75460700	Vegetable combinations (including carrots, broccoli, and/or dark-green leafy), cooked, with pasta*
75460710	Vegetable combinations (excluding carrots, broccoli, and dark-green leafy), cooked, with pasta*
75460800	Vegetable combinations (including carrots, broccoli, and/or dark-green leafy), cooked, with butter sauce and pasta*
75649150	Vegetable noodle soup, home recipe*
75651000	Minestrone soup, home recipe*
75651150	Vegetable noodle soup, canned, reduced sodium, prepared with water or ready-to-serve*
75652040	Vegetable beef soup with noodles or pasta, home recipe*
77316600	Eggplant and meat casserole*
<b>Salad dressings</b>	
Food Code	Food Description
27250040	Crab cake*
27416250	Beef salad*
27420020	Ham or pork salad*
27446200	Chicken or turkey salad*
27446205	Chicken or turkey salad with nuts and/or fruits*
27446220	Chicken or turkey salad with egg*
27450010	Crab salad*
27450020	Lobster salad*
27450030	Salmon salad*
27450060	Tuna salad*

27450070	Shrimp salad*
27450080	Seafood salad*
27450090	Tuna salad with cheese*
27450100	Tuna salad with egg*
27450130	Crab salad made with imitation crab*
27510220	Cheeseburger, with mayonnaise or salad dressing, on bun*
27510230	Cheeseburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510250	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing, on bun*
27510280	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on bun*
27510300	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on double-decker bun*
27510340	Double cheeseburger (2 patties), with mayonnaise or salad dressing and tomatoes, on bun*
27510350	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510360	Cheeseburger with mayonnaise or salad dressing, tomato and bacon, on bun*
27510370	Double cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510380	Triple cheeseburger (3 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510425	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510430	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510440	Bacon cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510520	Hamburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510550	Double hamburger (2 patties), with mayonnaise or salad dressing and tomatoes, on double-decker bun*
27510560	Hamburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510590	Hamburger, with mayonnaise or salad dressing, on bun*
27510690	Double hamburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes and/or catsup, on double-decker bun*
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread*
27513040	Roast beef submarine sandwich, with lettuce, tomato and spread*
27520130	Bacon, chicken, and tomato club sandwich, with lettuce and spread*
27520150	Bacon, lettuce, and tomato sandwich with spread*
27520160	Bacon, chicken, and tomato club sandwich, on multigrain roll with lettuce and spread*
27520300	Ham sandwich, with spread*
27520370	Hot ham and cheese sandwich, on bun*
27520390	Ham and cheese submarine sandwich, on multigrain roll, with lettuce, tomato and spread*
27540110	Chicken sandwich, with spread*
27540120	Chicken salad or chicken spread sandwich*
27540150	Chicken fillet (breaded, fried) sandwich with lettuce, tomato and spread*
27540170	Chicken patty sandwich, miniature, with spread*
27540190	Chicken patty sandwich, with lettuce and spread*
27540230	Chicken patty sandwich with cheese, on wheat bun, with lettuce, tomato and spread*
27540235	Chicken fillet, broiled, sandwich with lettuce, tomato, and spread*
27540240	Chicken fillet, (broiled), sandwich, on whole wheat roll, with lettuce, tomato and spread*
27540250	Chicken fillet, broiled, sandwich with cheese, on whole wheat roll, with lettuce, tomato and non-mayonnaise type spread*
27540260	Chicken fillet, broiled, sandwich, on oat bran bun, with lettuce, tomato, spread*
27540270	Chicken fillet, broiled, sandwich, with lettuce, tomato, and non-mayonnaise type spread*
27540280	Chicken fillet, broiled, sandwich with cheese, on bun, with lettuce, tomato and spread*
27540310	Turkey sandwich, with spread*
27540350	Turkey submarine sandwich, with cheese, lettuce, tomato and spread*
27550000	Fish sandwich, on bun, with spread*
27550100	Fish sandwich, on bun, with cheese and spread*
27550720	Tuna salad sandwich*
27550750	Tuna salad submarine sandwich, with lettuce and tomato*
27560910	Submarine, cold cut sandwich, with lettuce and tomato*
32102000	Egg, deviled*
32103000	Egg salad*

58134640	Tortellini, cheese-filled, meatless, with vinaigrette dressing*
58148110	Macaroni or pasta salad*
58148120	Macaroni or pasta salad with egg*
58148130	Macaroni or pasta salad with tuna*
58148140	Macaroni or pasta salad with crab meat*
58148150	Macaroni or pasta salad with shrimp*
58148160	Macaroni or pasta salad with tuna and egg*
58148170	Macaroni or pasta salad with chicken*
58148180	Macaroni or pasta salad with cheese*
58148500	Pasta or macaroni salad with oil and vinegar-type dressing*
58148550	Pasta or macaroni salad with meat*
63401010	Apple salad with dressing*
63402950	Fruit salad (excluding citrus fruits) with salad dressing or mayonnaise*
63403010	Fruit salad (including citrus fruits) with salad dressing or mayonnaise*
63413010	Pineapple salad with dressing*
71601010	Potato salad with egg*
71603010	Potato salad*
73101110	Carrots, raw, salad*
75140500	Broccoli salad with cauliflower, cheese, bacon bits, and dressing*
75141000	Cabbage salad or coleslaw, with dressing*
75141100	Cabbage salad or coleslaw with apples and/or raisins, with dressing*
75141200	Cabbage salad or coleslaw with pineapple, with dressing*
75302080	Bean salad, yellow and/or green string beans*
75416500	Pea salad*
75416600	Pea salad with cheese*
81302050	Tartar sauce*
83100100	Salad dressing, NFS
83100200	Salad dressing, NFS, for sandwiches
83101000	Blue or roquefort cheese dressing
83101500	Bacon dressing (hot)
83101600	Bacon and tomato dressing
83102000	Caesar dressing
83103000	Coleslaw dressing
83103500	Feta Cheese Dressing
83104000	French dressing
83105000	Fruit dressing, made with fruit juice and cream
83105100	Fruit dressing, made with honey, oil, and water
83105500	Honey mustard dressing
83106000	Italian dressing, made with vinegar and oil
83107000	Mayonnaise, regular
83107200	Mayonnaise, made with tofu
83108000	Mayonnaise, imitation
83108100	Mayonnaise, imitation, cholesterol free
83109000	Russian dressing
83110000	Mayonnaise-type salad dressing
83110010	Mayonnaise-type salad dressing, cholesterol-free
83112000	Green Goddess dressing
83112500	Creamy dressing, made with sour cream and/or buttermilk and oil
83112600	Cream cheese dressing
83112900	Milk, vinegar, and sugar dressing
83112950	Poppy seed dressing
83112960	Peppercorn Dressing
83112980	Celery seed dressing
83112990	Sesame dressing
83113000	Sweet and sour dressing
83114000	Thousand Island dressing
83115000	Yogurt dressing
83200100	Salad dressing, low-calorie, NFS

83201000	Blue or roquefort cheese dressing, low-calorie
83201050	Blue or roquefort cheese dressing, reduced calorie
83201200	Blue or roquefort cheese dressing, reduced calorie, fat-free, cholesterol-free
83202000	French dressing, low-calorie
83202010	French dressing, reduced calorie, fat-free, cholesterol-free
83202020	French dressing, reduced calorie
83203000	Caesar dressing, low-calorie
83203250	Mayonnaise-type salad dressing, fat-free
83204000	Mayonnaise, low-calorie or diet
83204020	Mayonnaise, reduced calorie or diet, cholesterol-free
83204050	Mayonnaise-type salad dressing, low-calorie or diet
83204060	Mayonnaise-type salad dressing, low-calorie or diet, cholesterol-free
83204500	Honey mustard dressing, reduced calorie
83205000	Italian dressing, low calorie
83205450	Italian dressing, reduced calorie
83205500	Italian dressing, reduced calorie, fat-free
83206000	Russian dressing, low-calorie
83207000	Thousand Island dressing, low-calorie
83207100	Thousand Island dressing, reduced calorie, fat-free, cholesterol-free
83208000	Vinegar, sugar, and water dressing
83210000	Creamy dressing, made with sour cream and/or buttermilk and oil, diet, NS as to low or reduced calorie
83210100	Creamy dressing, made with sour cream and/or buttermilk and oil, reduced calorie
83210200	Creamy dressing, made with sour cream and/or buttermilk and oil, reduced calorie, fat-free, cholesterol-free
83210250	Creamy dressing, made with sour cream and/or buttermilk and oil, reduced calorie, cholesterol-free
83220000	Salad dressing, low calorie, oil-free
91511070	Gelatin dessert, dietetic, with fruit and sour cream, sweetened with low calorie sweetener*

#### **Confectionary**

Food Code	Food Description
53100100	Cake, NS as to type, with or without icing*
53101200	Cake, angel food, with icing*
53101250	Cake, angel food, with fruit and icing or filling*
53102000	Cake, applesauce, NS as to icing*
53102200	Cake, applesauce, with icing*
53102700	Cake, banana, with icing*
53102800	Cake, black forest (chocolate-cherry)*
53103000	Cake, Boston cream pie*
53103600	Cake, butter, with icing*
53104000	Cake, carrot, NS as to icing*
53104260	Cake, carrot, with icing*
53104300	Cake, carrot, diet*
53104400	Cake, coconut, with icing*
53105050	Cake, chocolate, devil's food, or fudge, made from home recipe or purchased ready-to-eat, NS as to icing*
53105200	Cake, chocolate, devil's food, or fudge, standard-type mix (eggs and water added to dry mix), with icing, coating, or filling*
53105260	Cake, chocolate, devil's food, or fudge, with icing, coating, or filling, made from home recipe or purchased ready-to-eat*
53105300	Cake, German chocolate, with icing and filling*
53105500	Cake, chocolate, with icing, diet*
53105600	Cake, chocolate, devil's food, or fudge, pudding-type mix, made by "Lite" recipe (eggs and water added to dry mix, no oil added to dry mix), with icing, coating, or filling*
53105750	Cake, chocolate, devil's food, or fudge, pudding type mix, made by "cholesterol free" recipe (water, oil and egg whites added to dry mix), with "light" icing, coating or filling*
53107000	Cake, cupcake, NS as to type or icing*
53107200	Cake, cupcake, NS as to type, with icing*

53108000	Cake, cupcake, chocolate, NS as to icing*
53108200	Cake, cupcake, chocolate, with icing or filling*
53109200	Cake, cupcake, not chocolate, with icing or filling*
53109210	Cake, cupcake, not chocolate, with icing or filling, lowfat, cholesterol free*
53109250	Cake, cupcake, not chocolate, with fruit and cream filling*
53109270	Cake, cupcake, chocolate, with or without icing, fruit filling or cream filling, lowfat, cholesterol free*
53109300	Cake, Dobos Torte (non-chocolate layer cake with chocolate filling and icing)*
53114100	Cake, lemon, with icing*
53114250	Cake, lemon, lowfat, with icing*
53115200	Cake, marble, with icing*
53115320	Cake, nut, with icing*
53115410	Cake, oatmeal, with icing*
53115450	Cake, peanut butter, with icing*
53116020	Cake, pound, with icing*
53116510	Cake, pumpkin, with icing*
53116560	Cake, raisin-nut, with icing*
53117200	Cake, spice, with icing*
53118200	Cake, sponge, with icing*
53118350	Cake, sweetpotato, with icing*
53118500	Cake, torte*
53118550	Cake, tres leche*
53120000	Cake, white, standard-type mix (egg whites and water added), NS as to icing*
53120060	Cake, white, made from home recipe or purchased ready-to-eat, NS as to icing*
53120200	Cake, white, standard-type mix (egg whites and water added to mix), with icing*
53120260	Cake, white, with icing, made from home recipe or purchased ready-to-eat*
53120350	Cake, white, pudding-type mix (oil, egg whites, and water added to dry mix), with icing*
53121060	Cake, yellow, made from home recipe or purchased ready-to-eat, NS as to icing*
53121200	Cake, yellow, standard-type mix (eggs and water added to dry mix), with icing*
53121260	Cake, yellow, with icing, made from home recipe or purchased ready-to-eat*
53121330	Cake, yellow, pudding-type mix (oil, eggs, and water added to dry mix), with icing*
53124120	Cake, zucchini, with icing*
53204000	Cookie, brownie, NS as to icing*
53204100	Cookie, brownie, with icing*
53204800	Cookie, brownie, diet, NS as to icing*
53204830	Cookie, brownie, lowfat, with icing*
53204850	Cookie, brownie, fat free, cholesterol free, with icing*
53244010	Cookie, butter or sugar, with chocolate icing or filling*
53244020	Cookie, butter or sugar, with icing or filling other than chocolate*
53420000	Cream puff, eclair, custard or cream filled, NS as to icing*
53420200	Cream puff, eclair, custard or cream filled, iced*
53420210	Cream puff, eclair, custard or cream filled, iced, reduced fat*
53420410	Sopaipilla with syrup or honey*
53452420	Pastry, puff, custard or cream filled, iced or not iced*
53520000	Doughnut, NS as to cake or yeast*
53520140	Doughnut, cake type, chocolate covered*
53520150	Doughnut, cake type, chocolate covered, dipped in peanuts*
53520160	Doughnut, chocolate, cake type, with chocolate icing*
53521100	Doughnut, chocolate, raised or yeast, with chocolate icing*
53521130	Doughnut, raised or yeast, chocolate covered*
53521230	Doughnut, custard-filled, with icing*
53521300	Doughnut, wheat, chocolate covered*
54001000	Crackers, NS as to sweet or nonsweet*
91105010	Fructose sweetener, sugar substitute, dry powder
91107000	Sucralose-based sweetener, sugar substitute
91108000	Sugar substitute, herbal extract sweetener, powder
91108010	Sugar substitute, herbal extract sweetener, liquid
91200000	Sugar substitute, low-calorie, powdered, NFS

91200020	Sugar replacement, saccharin-based, dry powder
91200030	Brown sugar replacement, saccharin-based, dry powder
91200040	Sugar substitute, saccharin-based, dry powder and tablets
91200110	Sugar substitute, saccharin-based, liquid
91201010	Sugar substitute, aspartame-based, dry powder
91300010	Syrup, NFS
91300100	Pancake syrup, NFS
91301020	Cane and corn pancake syrup
91301030	Corn syrup, light or dark
91301040	Buttered blends syrup
91301050	Fruit syrup
91301060	Maple syrup (100% maple)
91301080	Chocolate syrup, thin type
91301081	Chocolate syrup, thin type, light
91301100	Sugar (white) and water syrup
91301130	Fruit flavored syrup used for milk beverages
91301200	Sugar (brown) and water syrup
91301250	Maple and corn and/or cane pancake syrup blends (formerly Corn and maple syrup (2% maple))
91301510	Syrup, pancake, reduced calorie
91302010	Honey
91303000	Molasses
91304010	Topping, butterscotch or caramel
91304020	Topping, chocolate, thick, fudge type
91304030	Topping, fruit
91304040	Topping, marshmallow
91304060	Topping, nut (wet)
91304070	Topping, peanut butter, thick, fudge type
91304090	Topping, chocolate flavored hazelnut spread
91304250	Topping, milk chocolate with cereal
91304300	Topping, chocolate, hard coating
91305010	Icing, chocolate
91305020	Icing, white
91351010	Syrup, dietetic
91351020	Topping, dietetic
91361010	Sweet and sour sauce
91361020	Fruit sauce
91361040	Plain dessert sauce
91361050	Duck sauce
91361070	Plum sauce, Oriental-style
91401000	Jelly, all flavors
91402000	Jam, preserves, all flavors
91403000	Fruit butter, all flavors
91404000	Marmalade, all flavors
91405000	Jelly, dietetic, all flavors, sweetened with artificial sweetener
91405500	Jelly, reduced sugar, all flavors
91406000	Jams, preserves, marmalades, dietetic, all flavors, sweetened with artificial sweetener
91406500	Jams, preserves, marmalades, sweetened with fruit juice concentrates, all flavors
91406600	Jams, preserves, marmalades, low sugar (all flavors)
91407100	Guava paste
91407150	Bean paste, sweetened
91700010	Candy, NFS
91700500	M&M's Almond Chocolate Candies
91701010	Almonds, chocolate covered
91701020	Almonds, sugar-coated
91701030	Almonds, yogurt-covered
91702010	Butterscotch morsels
91703010	Caramel, chocolate-flavored roll
91703020	Caramel, flavor other than chocolate

91703030	Caramel, with nuts
91703040	Caramel candy, chocolate covered
91703050	Caramel with nuts and cereal, chocolate covered
91703060	Caramel with nuts, chocolate covered
91703070	Rolo
91703080	Caramel, all flavors, sugar free
91703150	Toblerone, milk chocolate with honey and almond nougat
91703200	TWIX Cookie Bars
91703250	TWIX Chocolate Fudge Cookie Bars
91703300	TWIX Peanut Butter Cookie Bars
91703400	Whatchamacallit
91703500	Nuts, carob-coated
91703600	Espresso coffee beans, chocolate-covered
91705010	Milk chocolate candy, plain
91705020	Milk chocolate candy, with cereal
91705030	Kit Kat
91705040	Chocolate, milk, with nuts, not almond or peanuts
91705050	Milk chocolate candy, with fruit and nuts
91705060	Milk chocolate candy, with almonds
91705070	Chocolate, milk, with peanuts
91705090	Chocolate candy with fondant and caramel
91705200	Chocolate, semi-sweet morsel
91705300	Chocolate, sweet or dark
91705400	Chocolate, white
91705410	Chocolate, white, with almonds
91705420	Chocolate, white, with cereal
91705500	Mexican chocolate (tablet)
91706000	Coconut candy, chocolate covered
91706100	Coconut candy, no chocolate covering
91706400	Coconut candy, Puerto Rican style
91707000	Fondant
91707010	Fondant, chocolate covered
91708000	Fruit peel, candied
91708010	Date candy
91708020	Soft fruit confections
91708030	Fruit leather
91708040	Fun Fruits Creme Supremes
91708070	Tamarind candy
91708100	Fruit snack candy, with added vitamin C
91708150	Yogurt covered fruit snacks candy, with added vitamin C
91709000	Gumdrops, chocolate covered
91713010	Fudge, chocolate, chocolate-coated
91713030	Fudge, chocolate
91713040	Fudge, chocolate, with nuts
91713050	Fudge, peanut butter
91713070	Fudge, vanilla
91713080	Fudge, vanilla, with nuts
91715000	Fudge, caramel and nut, chocolate-coated candy
91715100	SNICKERS Bar
91715200	Baby Ruth
91715300	100 GRAND Bar
91718000	Honey-combed hard candy with peanut butter
91718050	Honey-combed hard candy with peanut butter, chocolate covered
91718100	Butterfinger
91718200	Chocolate-flavored sprinkles
91721000	Licorice
91723000	Marshmallow
91723010	Marshmallow, chocolate covered

91723020	Marshmallow, candy-coated
91726000	Nougat, plain
91726110	Nougat, with caramel, chocolate covered
91726130	MILKY WAY Bar
91726140	MILKY WAY DARK Bar
91726150	MARS Bar
91726410	Nougat, chocolate covered
91726420	3 MUSKETEER Bar
91727010	Nuts, chocolate covered, not almonds or peanuts
91728000	Nut roll, fudge or nougat, caramel and nuts
91728500	Sugared pecans (sugar and egg white coating)
91731000	Peanuts, chocolate covered
91731010	M&M's Peanut Chocolate Candies
91731060	M&M's Peanut Butter Chocolate Candies
91731100	Peanuts, sugar-coated
91732000	Peanut bar
91732100	Planters Peanut Bar
91733000	Peanut brittle
91733200	Peanut Bar, chocolate covered candy
91734000	Peanut butter, chocolate covered
91734100	Reese's Peanut Butter Cup
91734200	Reese's Pieces
91734300	Reese Sticks
91734400	Reese's Fast Break
91734450	Reese's Crispy Crunchy Bar
91734500	Peanut butter morsels
91735000	Pralines
91739010	Raisins, chocolate covered
91739600	Raisins, yogurt covered
91742010	Sesame Crunch (Sahadi)
91745010	Gumdrops
91745020	Hard candy
91745040	Butterscotch hard candy
91745100	Skittles
91746010	Sugar-coated chocolate discs
91746100	M&M's Plain Chocolate Candies
91746120	Sixlets
91746150	Easter egg, candy coated chocolate
91750000	Taffy
91760000	Toffee, plain
91760100	Toffee, chocolate covered
91760200	Toffee, chocolate-coated, with nuts
91760500	Truffles
91760700	Wax candy, liquid filled
91770000	Dietetic or low calorie candy, NFS
91770010	Dietetic or low calorie gumdrops
91770020	Dietetic or low calorie hard candy
91770030	Dietetic or low calorie candy, chocolate covered
91770050	Dietetic or low calorie mints
91780010	Snickers Marathon Energy bar
91781010	Snickers Marathon Protein bar

**Processed cheese spreads**

Food Code	Food Description
14301010	Cheese, cream
14303010	Cheese, cream, light or lite (formerly called Cream Cheese Lowfat)
14420000	Cheese spread, NFS
14420100	Cheese spread, American or Cheddar cheese base
14420160	Cheese spread, Swiss cheese base



14420200	Cheese spread, cream cheese, regular
14420210	Cheese spread, cream cheese, light or lite
14420300	Cheese spread, pressurized can
14620100	Dip, cream cheese base
14620120	Shrimp dip, cream cheese base*
58111200	Puffs, fried, crab meat and cream cheese filled*
91501050	Gelatin dessert with cream cheese*
91501080	Gelatin dessert with fruit and cream cheese*

**Frozen food entrees**

Food Code	Food Description
11459990	Yogurt, frozen, NS as to flavor, NS as to type of milk
11460000	Yogurt, frozen, flavors other than chocolate, NS as to type of milk
11460100	Yogurt, frozen, chocolate, NS as to type of milk
11460150	Yogurt, frozen, NS as to flavor, lowfat milk
11460160	Yogurt, frozen, chocolate, lowfat milk
11460170	Yogurt, frozen, flavors other than chocolate, lowfat milk
11460200	Yogurt, frozen, chocolate, nonfat milk
11460250	Yogurt, frozen, flavors other than chocolate, with sorbet or sorbet-coated
11460300	Yogurt, frozen, flavors other than chocolate, nonfat milk
11460400	Yogurt, frozen, chocolate, nonfat milk, with low-calorie sweetener
11460410	Yogurt, frozen, flavors other than chocolate, nonfat milk, with low-calorie sweetener
11460440	Yogurt, frozen, flavors other than chocolate, whole milk
11461000	Yogurt, frozen, chocolate-coated
11461250	Yogurt, frozen, cone, chocolate
11461260	Yogurt, frozen, cone, flavors other than chocolate
11461270	Yogurt, frozen, cone, flavors other than chocolate, lowfat milk
11461280	Yogurt, frozen, cone, chocolate, lowfat milk
12200100	Cream substitute, NS as to frozen, liquid, or powdered
12210100	Cream substitute, frozen
12220000	Whipped topping, nondairy, NS as to canned, frozen, or made from powdered mix
12220200	Whipped topping, nondairy, frozen
12220250	Whipped topping, nondairy, frozen, lowfat
12220270	Whipped topping, non dairy, frozen, fat free
12220280	Whipped topping, nondairy, frozen, sugar free
13110000	Ice cream, NFS
13110100	Ice cream, regular, flavors other than chocolate
13110110	Ice cream, regular, chocolate
13110120	Ice cream, rich, flavors other than chocolate
13110130	Ice cream, rich, chocolate
13110200	Ice cream, soft serve, flavors other than chocolate
13110210	Ice cream, soft serve, chocolate
13110220	Ice cream, soft serve, NS as to flavor
13110320	Ice cream, no sugar added, flavors other than chocolate
13110330	Ice cream, no sugar added, chocolate
13120050	Ice cream bar or stick, not chocolate covered or cake covered
13120100	Ice cream bar or stick, chocolate covered
13120110	Ice cream bar or stick, chocolate or caramel covered, with nuts
13120120	Ice cream bar or stick, rich chocolate ice cream, thick chocolate covering
13120121	Ice cream bar or stick, rich ice cream, thick chocolate covering
13120130	Ice cream bar or stick, rich ice cream, chocolate covered, with nuts
13120140	Ice cream bar or stick, chocolate ice cream, chocolate covered
13120300	Ice cream bar, cake covered
13120400	Ice cream bar or stick with fruit
13120500	Ice cream sandwich
13120550	Ice cream cookie sandwich
13120700	Ice cream cone with nuts, flavors other than chocolate
13120710	Ice cream cone, chocolate covered, with nuts, flavors other than chocolate
13120720	Ice cream cone, chocolate covered or dipped, flavors other than chocolate

13120730	Ice cream cone, no topping, flavors other than chocolate
13120740	Ice cream cone, no topping, NS as to flavor
13120750	Ice cream cone with nuts, chocolate ice cream
13120760	Ice cream cone, chocolate covered or dipped, chocolate ice cream
13120770	Ice cream cone, no topping, chocolate ice cream
13120790	Ice cream sundae cone
13120800	Ice cream soda, flavors other than chocolate
13121000	Ice cream sundae, NS as to topping, with whipped cream
13121100	Ice cream sundae, fruit topping, with whipped cream
13121300	Ice cream sundae, chocolate or fudge topping, with whipped cream
13121400	Ice cream sundae, not fruit or chocolate topping, with whipped cream
13122100	Ice cream pie, no crust
13122500	Ice cream pie, with cookie crust, fudge topping, and whipped cream
13126000	Ice cream, fried
13130100	Light ice cream, NS as to flavor (formerly ice milk)
13130300	Light ice cream, flavors other than chocolate (formerly ice milk)
13130310	Light ice cream, chocolate (formerly ice milk)
13130320	Light ice cream, no sugar added, NS as to flavor
13130330	Light ice cream, no sugar added, flavors other than chocolate
13130340	Light ice cream, no sugar added, chocolate
13130590	Light ice cream, soft serve, NS as to flavor (formerly ice milk)
13130600	Light ice cream, soft serve, flavors other than chocolate (formerly ice milk)
13130610	Light ice cream, soft serve, chocolate (formerly ice milk)
13130620	Light ice cream, soft serve cone, flavors other than chocolate (formerly ice milk)
13130630	Light ice cream, soft serve cone, chocolate (formerly ice milk)
13130640	Light ice cream, soft serve cone, NS as to flavor (formerly ice milk)
13130700	Light ice cream, soft serve, blended with candy or cookies
13135000	Light ice cream, sandwich (formerly ice milk)
13135010	Ice cream sandwich, made with light chocolate ice cream
13136000	Ice cream sandwich, made with light, no sugar added ice cream
13140100	Light ice cream, bar or stick, chocolate-coated (formerly ice milk)
13140110	Light ice cream, bar or stick, chocolate covered, with nuts (formerly ice milk)
13140500	Light ice cream, cone, flavors other than chocolate (formerly ice milk)
13140550	Light ice cream, cone, chocolate (formerly ice milk)
13140650	Light ice cream, sundae, soft serve, not fruit or chocolate topping, with whipped cream (formerly ice milk)
13140660	Light ice cream, sundae, soft serve, chocolate or fudge topping (without whipped cream) (formerly ice milk)
13140670	Light ice cream, sundae, soft serve, fruit topping (without whipped cream) (formerly ice milk)
13140680	Light ice cream, sundae, soft serve, not fruit or chocolate topping (without whipped cream) (formerly ice milk)
13140700	Light ice cream, creamsicle or dreamsicle (formerly ice milk)
13140900	Light ice cream, fudgesicle (formerly ice milk)
13142000	Milk dessert bar or stick, frozen, with coconut
13150000	Sherbet, all flavors
13160150	Fat free ice cream, no sugar added, chocolate
13160160	Fat free ice cream, no sugar added, flavors other than chocolate
13160400	Fat free ice cream, flavors other than chocolate
13160410	Fat free ice cream, chocolate
13161000	Milk dessert bar, frozen, made from lowfat milk
13161500	Milk dessert sandwich bar, frozen, made from lowfat milk
13161520	Milk dessert sandwich bar, frozen, with low-calorie sweetener, made from lowfat milk
13161600	Milk dessert bar, frozen, made from lowfat milk and low calorie sweetener
13161630	Light ice cream, bar or stick, with low-calorie sweetener, chocolate-coated (formerly ice milk)
28101000	Frozen dinner, NFS
28110000	Beef dinner, NFS (frozen meal)
28110150	Beef with vegetable (diet frozen meal)
28110220	Sirloin, chopped, with gravy, mashed potatoes, vegetable (frozen meal)

28110270	Sirloin beef with gravy, potatoes, vegetable (frozen meal)
28110300	Salisbury steak dinner, NFS (frozen meal)
28110310	Salisbury steak with gravy, potatoes, vegetable (frozen meal)
28110330	Salisbury steak with gravy, whipped potatoes, vegetable, dessert (frozen meal)
28110350	Salisbury steak with gravy, potatoes, vegetable, dessert (frozen meal, large meat portion)
28110370	Salisbury steak with gravy, macaroni and cheese, vegetable (frozen meal)
28110380	Salisbury steak with gravy, macaroni and cheese (frozen meal)
28110390	Salisbury steak, potatoes, vegetable, dessert (diet frozen meal)
28110510	Beef, sliced, with gravy, potatoes, vegetable (frozen meal)
28110620	Beef short ribs, boneless, with barbecue sauce, potatoes, vegetable (frozen meal)
28110640	Meatballs, Swedish, in sauce, with noodles (frozen meal)
28110660	Meatballs, Swedish, in gravy, with noodles (diet frozen meal)
28113110	Salisbury steak, baked, with tomato sauce, vegetable (diet frozen meal)
28113140	Beef with spaetzle or rice, vegetable (frozen meal)
28120310	Pork with rice, vegetable, in soy-based sauce (diet frozen meal)
28133110	Veal, breaded, with spaghetti, in tomato sauce (frozen meal)
28140100	Chicken dinner, NFS (frozen meal)
28140150	Chicken divan (frozen meal)
28140320	Chicken and noodles with vegetable, dessert (frozen meal)
28140710	Chicken, fried, with potatoes, vegetable (frozen meal)
28140720	Chicken patty, or nuggets, boneless, breaded, potatoes, vegetable (frozen meal)
28140730	Chicken patty, breaded, with tomato sauce and cheese, fettuccine alfredo, vegetable (frozen meal)
28140740	Chicken patty, or nuggets, boneless, breaded, with pasta and tomato sauce, fruit, dessert (frozen meal)
28140810	Chicken, fried, with potatoes, vegetable, dessert (frozen meal)
28141010	Chicken, fried, with potatoes, vegetable, dessert (frozen meal, large meat portion)
28141050	Chicken patty parmigiana, breaded, with vegetable (diet frozen meal)
28141201	Teriyaki chicken with rice and vegetable (diet frozen meal)
28141250	Chicken with rice-vegetable mixture (diet frozen meal)
28141300	Chicken with rice and vegetable, reduced fat and sodium (diet frozen meal)
28141600	Chicken a la king with rice (frozen meal)
28141610	Chicken and vegetables in cream or white sauce (diet frozen meal)
28141650	Chicken and vegetables au gratin with rice-vegetable mixture (diet frozen entree)
28143010	Chicken and vegetable entree with rice, Oriental (frozen meal)
28143020	Chicken and vegetable entree with rice, Oriental (diet frozen meal)
28143030	Chicken and vegetable entree, oriental (diet frozen meal)
28143040	Chicken chow mein with rice (diet frozen meal)
28143080	Chicken with noodles and cheese sauce (diet frozen meal)
28143110	Chicken cacciatore with noodles (diet frozen meal)
28143130	Chicken and vegetable entree with noodles (frozen meal)
28143150	Chicken and vegetable entree with noodles (diet frozen meal)
28143170	Chicken in cream sauce with noodles and vegetable (frozen meal)
28143180	Chicken in butter sauce with potatoes and vegetable (diet frozen meal)
28143190	Chicken in mushroom sauce, white and wild rice, vegetable (frozen meal)
28143200	Chicken in soy-based sauce, rice and vegetables (frozen meal)
28143210	Chicken in orange sauce with almond rice (diet frozen meal)
28143220	Chicken in barbecue sauce, with rice, vegetable and dessert, reduced fat and sodium (diet frozen meal)
28144100	Chicken and vegetable entree with noodles and cream sauce (frozen meal)
28145000	Turkey dinner, NFS (frozen meal)
28145100	Turkey with dressing, gravy, vegetable and fruit (diet frozen meal)
28145110	Turkey with vegetable, stuffing (diet frozen meal)
28145210	Turkey with gravy, dressing, potatoes, vegetable (frozen meal)
28145610	Turkey with gravy, dressing, potatoes, vegetable, dessert (frozen meal, large meat portion)
28145710	Turkey tetrazzini (frozen meal)
28150000	Fish dinner, NFS (frozen meal)
28150210	Haddock with chopped spinach (diet frozen meal)

28150220	Flounder with chopped broccoli (diet frozen meal)
28150510	Fish in lemon-butter sauce with starch item, vegetable (frozen meal)
28150650	Fish, breaded, or fish sticks, with pasta, vegetable and dessert (frozen meal)
28152050	Shrimp with rice, vegetable (frozen meal)
28153010	Shrimp and clams in tomato-based sauce, with noodles (frozen meal)
28154010	Shrimp and vegetables in sauce with noodles (diet frozen meal)
28160300	Meat loaf dinner, NFS (frozen meal)
28160310	Meat loaf with potatoes, vegetable (frozen meal)
28160650	Stuffed green pepper (frozen meal)
28160710	Stuffed cabbage, with meat and tomato sauce (diet frozen meal)
33000100	Egg substitute, NS as to powdered, frozen, or liquid
33201010	Scrambled egg, made from cholesterol-free frozen mixture
33201110	Scrambled egg, made from cholesterol-free frozen mixture with cheese
33201500	Scrambled egg, made from cholesterol-free frozen mixture with vegetables
33202010	Scrambled egg, made from frozen mixture
35001000	Scrambled eggs, sausage, hash brown potatoes (frozen meal)
35002000	Scrambled eggs, bacon, home fried potatoes (frozen meal)
41480000	Tofu, frozen dessert, flavors other than chocolate
41480010	Tofu, frozen dessert, chocolate
53112000	Cake, ice cream and cake roll, chocolate
53112100	Cake, ice cream and cake roll, not chocolate
53366000	Pie, yogurt, frozen
58106200	Pizza, cheese, prepared from frozen, thin crust
58106205	Pizza, cheese, prepared from frozen, thick crust
58106300	Pizza, cheese, with vegetables, prepared from frozen, thin crust
58106305	Pizza, cheese with vegetables, prepared from frozen, thick crust
58106500	Pizza with meat, prepared from frozen, thin crust
58106505	Pizza with meat, prepared from frozen, thick crust
58106700	Pizza with meat and vegetables, prepared from frozen, thin crust
58106705	Pizza with meat and vegetables, prepared from frozen, thick crust
58301020	Lasagna with cheese and sauce (diet frozen meal)
58301030	Veal lasagna (diet frozen meal)
58301050	Lasagna with cheese and meat sauce (diet frozen meal)
58301110	Vegetable lasagna (frozen meal)
58301150	Zucchini lasagna (diet frozen meal)
58302000	Macaroni and cheese (diet frozen meal)
58302050	Beef and noodles with meat sauce and cheese (diet frozen meal)
58302060	Spaghetti or noodles with beef in tomato-based sauce, lowfat, reduced sodium (diet frozen meal)
58302080	Noodles with vegetables in tomato-based sauce (diet frozen meal)
58303100	Rice, with broccoli, cheese sauce (frozen side dish)
58304010	Spaghetti and meatballs dinner, NFS (frozen meal)
58304050	Spaghetti with meat and mushroom sauce (diet frozen meal)
58304060	Spaghetti with meat sauce (diet frozen meal)
58304200	Ravioli, cheese-filled, with tomato sauce (diet frozen meal)
58304220	Rigatoni with meat sauce and cheese (diet frozen meal)
58304230	Ravioli, cheese-filled, with vegetable and fruit (frozen meal)
58304250	Manicotti, cheese-filled, with tomato sauce (diet frozen meal)
58304400	Linguini with vegetables and seafood in white wine sauce (diet frozen meal)
58305250	Pasta with vegetable and cheese sauce (diet frozen meal)
58306010	Beef enchilada dinner, NFS (frozen meal)
58306020	Beef enchilada, chili gravy, rice, refried beans (frozen meal)
58306070	Cheese enchilada (frozen meal)
58306100	Chicken enchilada (diet frozen meal)
58310210	Sausage and french toast (frozen meal)
58310310	Pancakes and sausage (frozen meal)
63420100	Fruit juice bar, frozen, orange flavor
63420110	Fruit juice bar, frozen, flavor other than orange

63420200	Fruit juice bar, frozen, sweetened with low calorie sweetener, flavors other than orange
63430100	Sorbet, fruit, noncitrus flavor
63430110	Sorbet, fruit, citrus flavor
71401000	White potato, french fries, NS as to from fresh or frozen
71401020	White potato, french fries, from frozen, oven baked
71401030	White potato, french fries, from frozen, deep fried
71402040	White potato, french fries, breaded or battered
71403000	White potato, home fries
71403500	White potato, home fries, with green or red peppers and onions
71405000	White potato, hash brown, NS as to from fresh, frozen, or dry mix
71405020	White potato, hash brown, from frozen
71405100	White potato, hash brown, with cheese
71410000	White potato skins, with adhering flesh, fried
71410500	White potato skins, with adhering flesh, fried, with cheese
71411000	White potato skins, with adhering flesh, fried, with cheese and bacon

**Flavor enhancing**

**Non-carbonated beverages**

Food Code	Food Description
11561000	Cafe con leche
28401200	Gelatin drink, powder, flavored, with low-calorie sweetener, reconstituted
42401010	Coconut milk (liquid expressed from grated coconut meat, water added)
42403010	Coconut water (liquid from coconuts)
42404010	Coconut water, canned or bottled
61201020	Grapefruit juice, NS as to form
61201220	Grapefruit juice, canned, bottled or in a carton
61201620	Grapefruit juice, frozen (reconstituted with water)
61210000	Orange juice, NFS
61210220	Orange juice, canned, bottled or in a carton
61210250	Orange juice, with calcium added, canned, bottled or in a carton
61210620	Orange juice, frozen (reconstituted with water)
61210720	Orange juice, frozen, not reconstituted
61210820	Orange juice, frozen, with calcium added (reconstituted with water)
61213000	Tangerine juice, NFS
61213220	Tangerine juice, canned
61213800	Fruit juice blend, including citrus, 100% juice
61213900	Fruit juice blend, including citrus, 100% juice, with calcium added
61214000	Grape-tangerine-lemon juice
61216010	Grapefruit and orange juice, fresh
61219000	Orange and banana juice
61219100	Pineapple-orange-banana juice
61219150	Orange-white grape-peach juice
61222000	Pineapple-grapefruit juice, NFS
61225000	Pineapple-orange juice, NFS
61225200	Pineapple-orange juice, canned, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
61225220	Pineapple-orange juice, canned, bottled or in a carton
61226000	Strawberry-banana-orange juice
64100100	Fruit juice, NFS
64100110	Fruit juice blend, 100% juice, with added Vitamin C
64100200	Fruit juice blend, with cranberry, 100% juice
64101010	Apple cider
64104010	Apple juice
64104150	Apple-cherry juice
64104200	Apple-pear juice
64104450	Apple-raspberry juice
64104500	Apple-grape juice
64104600	Blackberry juice
64105400	Cranberry juice, unsweetened

64105500	Cranberry-white grape juice mixture, unsweetened
64116020	Grape juice
64120010	Papaya juice
64121000	Passion fruit juice
64124020	Pineapple juice
64124200	Pineapple-apple-guava juice, with added vitamin C
64125000	Pineapple juice-non-citrus juice blend, unsweetened, with added vitamin C
64126000	Pomegranate juice
64132010	Prune juice
64132020	Prune juice, unsweetened
64132500	Strawberry juice
64133100	Watermelon juice
64134000	Fruit smoothie drink, made with fruit or fruit juice only (no dairy products)
64200100	Fruit nectar, NFS
64201010	Apricot nectar
64201500	Banana nectar
64202010	Cantaloupe nectar
64203020	Guava nectar
64204010	Mango nectar
64205010	Peach nectar
64210010	Papaya nectar
64213010	Passion fruit nectar
64215010	Pear nectar
64221010	Soursop (Guanabana) nectar
73105010	Carrot juice
74301100	Tomato juice
74301150	Tomato juice, low sodium
74302000	Tomato juice cocktail
74303000	Tomato and vegetable juice, mostly tomato
74303100	Tomato and vegetable juice, mostly tomato, low sodium
74304000	Tomato juice with clam or beef juice
75132000	Mixed vegetable juice (vegetables other than tomato)
75132100	Celery juice
75200700	Aloe vera juice
78101000	Vegetable and fruit juice blend, 100% juice, with high vitamin C plus added vitamin E and vitamin A
92100000	Coffee, NS as to type
92100500	Coffee, regular, NS as to ground or instant
92101600	Coffee, Turkish
92101610	Coffee, espresso
92101630	Coffee, espresso, decaffeinated
92101800	Coffee, Cuban
92101900	Coffee, latte
92101910	Coffee, latte, decaffeinated
92101920	Frappuccino, regular
92101930	Frappuccino, decaffeinated
92101950	Coffee, mocha
92111000	Coffee, decaffeinated, NS as to ground or instant
92130000	Coffee, presweetened with sugar, pre-lightened
92130006	Coffee, decaffeinated, with low-calorie sweetener, pre-lightened
92130010	Coffee, pre-lightened, no sugar
92130020	Coffee, presweetened with sugar
92161000	Cappuccino
92162000	Cappuccino, decaffeinated
92201010	Postum
92202010	Chicory
92203000	Cereal beverage
92204000	Mate, sweetened beverage made from dried green leaves

92205000	Rice beverage
92291300	Postum, dry powder
92301000	Tea, NS as to type, unsweetened
92301060	Tea, NS as to type, presweetened with sugar
92301080	Tea, NS as to type, presweetened with low calorie sweetener
92301100	Tea, NS as to type, decaffeinated, unsweetened
92301130	Tea, NS as to type, presweetened, NS as to sweetener
92301160	Tea, NS as to type, decaffeinated, presweetened with sugar
92301180	Tea, NS as to type, decaffeinated, presweetened with low calorie sweetener
92301190	Tea, NS as to type, decaffeinated, presweetened, NS as to sweetener
92306000	Tea, herbal
92306020	Tea, herbal, presweetened with sugar
92306030	Tea, herbal, presweetened with low calorie sweetener
92306040	Tea, herbal, presweetened, NS as to sweetener
92306100	Corn beverage
92306700	Tea, chamomile
92510120	Apple-cherry drink
92510150	Apple juice drink
92510170	Apple-cranberry-grape juice drink
92510200	Apple-orange-pineapple juice drink
92510310	Banana-orange drink
92510410	Black cherry drink
92510610	Fruit drink
92510630	Fruit juice drink, NFS
92510650	Tamarind drink, Puerto Rican (Refresco de tamarindo)
92510720	Fruit punch, made with fruit juice and soda
92510730	Fruit punch, made with soda, fruit juice, and sherbet or ice cream
92510810	Grapeade and grape drink
92510820	Grape juice drink
92510910	Grapefruit juice drink
92510950	Guava juice drink
92511000	Lemonade, frozen concentrate, not reconstituted
92511010	Lemonade
92511020	Lemon-limeade
92511110	Limeade
92511200	Orange-mango juice drink
92511220	Orange drink
92511250	Citrus fruit juice drink
92511260	Orange-cranberry juice drink
92511270	Orange-peach juice drink
92511280	Orange-grape-banana juice drink
92511290	Papaya juice drink
92511310	Pineapple-grapefruit juice drink
92511340	Pineapple-orange juice drink
92511400	Raspberry-flavored drink
92511510	Strawberry-flavored drink
92512040	Frozen daiquiri mix, frozen concentrate, not reconstituted
92520410	Fruit drink, low calorie
92520910	Lemonade, low calorie
92530310	Cherry drink with vitamin C added
92530410	Citrus drink with vitamin C added
92530510	Cranberry juice drink with vitamin C added
92530520	Cranberry-apple juice drink with vitamin C added
92530610	Fruit punch, fruit drink, or fruitade, with vitamin C added
92530810	Grapefruit juice drink with vitamin C added
92530840	Guava juice drink with vitamin C added
92530910	Lemonade with vitamin C added
92530950	Vegetable and fruit juice drink, with vitamin C added

92531010	Orange drink and orangeade with vitamin C added
92531020	Orange breakfast drink, made from frozen concentrate
92531030	Fruit juice drink, with thiamin (vitamin B1) and vitamin C
92541010	Fruit-flavored drink, made from sweetened powdered mix (fortified with vitamin C)
92541020	Lemonade-flavored drink, made from powdered mix, with sugar
92541040	Lemonade-flavored drink, made from powdered mix, low calorie
92541100	Apple cider-flavored drink, made from powdered mix, with sugar and vitamin C added
92542000	Fruit-flavored drink, made from powdered mix, mainly sugar, with high vitamin C added
92544000	Fruit-flavored drink, made from unsweetened powdered mix (fortified with vitamin C), with sugar added in preparation
92550030	Fruit juice drink, low calorie, with high vitamin C
92550040	Fruit juice drink, low calorie
92550050	Apple-white grape juice drink, low calorie, with vitamin C added
92550110	Cranberry juice drink, low calorie, with vitamin C added
92550210	Cranberry-apple juice drink, low calorie, with vitamin C added
92550300	Grapefruit juice drink, low calorie, with vitamin C added
92550350	Light orange juice beverage, 40-50% juice, lower sugar and calories, with artificial sweetener
92550400	Vegetable and fruit juice drink, low calorie, with high vitamin C
92550610	Fruit-flavored drinks, punches, ades, low calorie, with vitamin C added
92550620	Fruit flavored drink, low calorie
92551700	Juice drink, low calorie
92552000	Fruit-flavored drink, made from powdered mix with high vitamin C added, low calorie
92552010	Fruit flavored drink, made from powdered mix, low calorie
92552020	Fruit juice drink, reduced sugar, with thiamin (vitamin B1) and vitamin C
92552030	Fruit juice drink, reduced sugar, with vitamin E
92552100	Orange-cranberry juice drink, low calorie, with vitamin C added
92553000	Fruit-flavored thirst quencher beverage, low calorie
92560000	Fruit-flavored thirst quencher beverage
92560100	Gatorade Thirst Quencher sports drink
92560200	Powerade sports drink
92570100	Fluid replacement, electrolyte solution
92570500	Fluid replacement, 5% glucose in water
92582100	Citrus juice drink, calcium fortified
92582110	Fruit juice drink, with thiamin (vitamin B1) and vitamin C plus calcium
92582120	Fruit flavored drink, reduced sugar, with high vitamin C, plus added calcium
92610010	Horchata, Puerto Rican
92611010	Oatmeal beverage, Puerto Rican
92611100	Oatmeal beverage with milk (Atole de avena)
92611510	Rice beverage, Mexican, (Horchata)
92611600	Horchata beverage, NFS
92612010	Sugar cane beverage, Puerto Rican
92613010	Atole (corn meal beverage)
92613510	Corn beverage with chocolate and milk (Champurrado, Atole de Chocolate)
92731000	Fruit-flavored drink, non-carbonated, made from powdered mix, with sugar
92741000	Fruit-flavored drink, non-carbonated, made from low calorie powdered mix
92804000	Shirley Temple
92900110	Fruit-flavored concentrate, dry powder, with sugar and vitamin C added
92900200	Fruit-flavored beverage, dry concentrate, low calorie, not reconstituted
92900300	Fruit-flavored thirst quencher beverage, dry concentrate, not reconstituted
94100200	Water, bottled, sweetened, with low or no calorie sweetener
94100300	Water, fruit flavored, sweetened, with high fructose corn syrup and low calorie sweetener
94210100	Propel Fitness Water
94210200	Vitamin Water
<b>Fruit drinks</b>	
Food Code	Food Description
42403010	Coconut water (liquid from coconuts)
42404010	Coconut water, canned or bottled
61201020	Grapefruit juice, NS as to form



61201220	Grapefruit juice, canned, bottled or in a carton
61201620	Grapefruit juice, frozen (reconstituted with water)
61210000	Orange juice, NFS
61210220	Orange juice, canned, bottled or in a carton
61210250	Orange juice, with calcium added, canned, bottled or in a carton
61210620	Orange juice, frozen (reconstituted with water)
61210720	Orange juice, frozen, not reconstituted
61210820	Orange juice, frozen, with calcium added (reconstituted with water)
61213000	Tangerine juice, NFS
61213220	Tangerine juice, canned
61213800	Fruit juice blend, including citrus, 100% juice
61213900	Fruit juice blend, including citrus, 100% juice, with calcium added
61214000	Grape-tangerine-lemon juice
61216010	Grapefruit and orange juice, fresh
61219000	Orange and banana juice
61219100	Pineapple-orange-banana juice
61219150	Orange-white grape-peach juice
61222000	Pineapple-grapefruit juice, NFS
61225000	Pineapple-orange juice, NFS
61225200	Pineapple-orange juice, canned, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
61225220	Pineapple-orange juice, canned, bottled or in a carton
61226000	Strawberry-banana-orange juice
64100100	Fruit juice, NFS
64100110	Fruit juice blend, 100% juice, with added Vitamin C
64100200	Fruit juice blend, with cranberry, 100% juice
64101010	Apple cider
64104010	Apple juice
64104150	Apple-cherry juice
64104200	Apple-pear juice
64104450	Apple-raspberry juice
64104500	Apple-grape juice
64104600	Blackberry juice
64105400	Cranberry juice, unsweetened
64105500	Cranberry-white grape juice mixture, unsweetened
64116020	Grape juice
64120010	Papaya juice
64121000	Passion fruit juice
64124020	Pineapple juice
64124200	Pineapple-apple-guava juice, with added vitamin C
64125000	Pineapple juice-non-citrus juice blend, unsweetened, with added vitamin C
64126000	Pomegranate juice
64132010	Prune juice
64132020	Prune juice, unsweetened
64132500	Strawberry juice
64133100	Watermelon juice
64134000	Fruit smoothie drink, made with fruit or fruit juice only (no dairy products)
64200100	Fruit nectar, NFS
64201010	Apricot nectar
64201500	Banana nectar
64202010	Cantaloupe nectar
64203020	Guava nectar
64204010	Mango nectar
64205010	Peach nectar
64210010	Papaya nectar
64213010	Passion fruit nectar
64215010	Pear nectar
64221010	Soursop (Guanabana) nectar

73105010	Carrot juice
74301100	Tomato juice
74301150	Tomato juice, low sodium
74302000	Tomato juice cocktail
74303000	Tomato and vegetable juice, mostly tomato
74303100	Tomato and vegetable juice, mostly tomato, low sodium
74304000	Tomato juice with clam or beef juice
75132000	Mixed vegetable juice (vegetables other than tomato)
75132100	Celery juice
75200700	Aloe vera juice
78101000	Vegetable and fruit juice blend, 100% juice, with high vitamin C plus added vitamin E and vitamin A
92510120	Apple-cherry drink
92510150	Apple juice drink
92510170	Apple-cranberry-grape juice drink
92510200	Apple-orange-pineapple juice drink
92510310	Banana-orange drink
92510410	Black cherry drink
92510610	Fruit drink
92510630	Fruit juice drink, NFS
92510650	Tamarind drink, Puerto Rican (Refresco de tamarindo)
92510720	Fruit punch, made with fruit juice and soda
92510730	Fruit punch, made with soda, fruit juice, and sherbet or ice cream
92510810	Grapeade and grape drink
92510820	Grape juice drink
92510910	Grapefruit juice drink
92510950	Guava juice drink
92511000	Lemonade, frozen concentrate, not reconstituted
92511010	Lemonade
92511020	Lemon-limeade
92511110	Limeade
92511200	Orange-mango juice drink
92511220	Orange drink
92511250	Citrus fruit juice drink
92511260	Orange-cranberry juice drink
92511270	Orange-peach juice drink
92511280	Orange-grape-banana juice drink
92511290	Papaya juice drink
92511310	Pineapple-grapefruit juice drink
92511340	Pineapple-orange juice drink
92511400	Raspberry-flavored drink
92511510	Strawberry-flavored drink
92512040	Frozen daiquiri mix, frozen concentrate, not reconstituted
92520410	Fruit drink, low calorie
92520910	Lemonade, low calorie
92530310	Cherry drink with vitamin C added
92530410	Citrus drink with vitamin C added
92530510	Cranberry juice drink with vitamin C added
92530520	Cranberry-apple juice drink with vitamin C added
92530610	Fruit punch, fruit drink, or fruitade, with vitamin C added
92530810	Grapefruit juice drink with vitamin C added
92530840	Guava juice drink with vitamin C added
92530910	Lemonade with vitamin C added
92530950	Vegetable and fruit juice drink, with vitamin C added
92531010	Orange drink and orangeade with vitamin C added
92531020	Orange breakfast drink, made from frozen concentrate
92531030	Fruit juice drink, with thiamin (vitamin B1) and vitamin C
92541010	Fruit-flavored drink, made from sweetened powdered mix (fortified with vitamin C)

92541020	Lemonade-flavored drink, made from powdered mix, with sugar
92541040	Lemonade-flavored drink, made from powdered mix, low calorie
92541100	Apple cider-flavored drink, made from powdered mix, with sugar and vitamin C added
92542000	Fruit-flavored drink, made from powdered mix, mainly sugar, with high vitamin C added
92544000	Fruit-flavored drink, made from unsweetened powdered mix (fortified with vitamin C), with sugar added in preparation
92550030	Fruit juice drink, low calorie, with high vitamin C
92550040	Fruit juice drink, low calorie
92550050	Apple-white grape juice drink, low calorie, with vitamin C added
92550110	Cranberry juice drink, low calorie, with vitamin C added
92550210	Cranberry-apple juice drink, low calorie, with vitamin C added
92550300	Grapefruit juice drink, low calorie, with vitamin C added
92550350	Light orange juice beverage, 40-50% juice, lower sugar and calories, with artificial sweetener
92550400	Vegetable and fruit juice drink, low calorie, with high vitamin C
92550610	Fruit-flavored drinks, punches, ades, low calorie, with vitamin C added
92550620	Fruit flavored drink, low calorie
92551700	Juice drink, low calorie
92552000	Fruit-flavored drink, made from powdered mix with high vitamin C added, low calorie
92552010	Fruit flavored drink, made from powdered mix, low calorie
92552020	Fruit juice drink, reduced sugar, with thiamin (vitamin B1) and vitamin C
92552030	Fruit juice drink, reduced sugar, with vitamin E
92552100	Orange-cranberry juice drink, low calorie, with vitamin C added
92582100	Citrus juice drink, calcium fortified
92582110	Fruit juice drink, with thiamin (vitamin B1) and vitamin C plus calcium
92582120	Fruit flavored drink, reduced sugar, with high vitamin C, plus added calcium
92731000	Fruit-flavored drink, non-carbonated, made from powdered mix, with sugar
92741000	Fruit-flavored drink, non-carbonated, made from low calorie powdered mix
92804000	Shirley Temple
92900110	Fruit-flavored concentrate, dry powder, with sugar and vitamin C added
92900200	Fruit-flavored beverage, dry concentrate, low calorie, not reconstituted
92900300	Fruit-flavored thirst quencher beverage, dry concentrate, not reconstituted

**Moisture retention and in seasoning brine and solutions**

**Processed meat**

Food Code	Food Description
14620320	Topping from meat pizza*
14620330	Topping from meat and vegetable pizza*
21002000	Beef, pickled
21416000	Corned beef, cooked, NS as to fat eaten
21416110	Corned beef, cooked, lean and fat eaten
21416120	Corned beef, cooked, lean only eaten
21416150	Corned beef, canned, ready-to-eat
21500100	Ground beef or patty, cooked, NS as to regular, lean, or extra lean
21500110	Ground beef, meatballs, meat only, cooked, NS as to regular, lean, or extra lean
21500200	Ground beef or patty, breaded, cooked
21500300	Ground beef patty, cooked (for fast food sandwiches)
21601000	Beef, bacon, cooked
21601500	Beef, bacon, formed, lean meat added, cooked
21602000	Beef, dried, chipped, uncooked
21602010	Beef, dried, chipped, cooked in fat
21602100	Beef jerky
21603000	Beef, pastrami (beef, smoked, spiced)
22002800	Pork jerky
22107010	Pork chop, smoked or cured, cooked, lean and fat eaten
22107020	Pork chop, smoked or cured, cooked, lean only eaten
22300120	Ham, fried, NS as to fat eaten
22300130	Ham, fried, lean and fat eaten
22300140	Ham, fried, lean only eaten
22300150	Ham, breaded or floured, fried, NS as to fat eaten

22300170	Ham, breaded or floured, fried, lean only eaten
22311000	Ham, smoked or cured, cooked, NS as to fat eaten
22311010	Ham, smoked or cured, cooked, lean and fat eaten
22311020	Ham, smoked or cured, cooked, lean only eaten
22311450	Ham, prosciutto
22311500	Ham, smoked or cured, canned, NS as to fat eaten
22311510	Ham, smoked or cured, canned, lean and fat eaten
22311520	Ham, smoked or cured, canned, lean only eaten
22421010	Pork roast, smoked or cured, cooked, lean and fat eaten
22421020	Pork roast, smoked or cured, cooked, lean only eaten
22431000	Pork roll, cured, fried
22501010	Canadian bacon, cooked
22600100	Bacon, NS as to type of meat, cooked
22600200	Pork bacon, NS as to fresh, smoked or cured, cooked
22601000	Pork bacon, smoked or cured, cooked
22601040	Bacon or side pork, fresh, cooked
22602010	Pork bacon, smoked or cured, lower sodium
22605010	Pork bacon, formed, lean meat added, cooked
22709010	Pork skin, rinds, deep-fried
23322100	Deer bologna
24208500	Turkey bacon, cooked
25112200	Liver paste or pate, chicken
25210110	Frankfurter, wiener, or hot dog, NFS
25210150	Frankfurter or hot dog, cheese-filled
25210210	Frankfurter or hot dog, beef
25210220	Frankfurter or hot dog, beef and pork
25210230	Frankfurter or hot dog, beef and pork, lowfat
25210250	Frankfurter or hot dog, meat and poultry, fat free
25210280	Frankfurter or hot dog, meat and poultry
25210310	Frankfurter or hot dog, chicken
25210410	Frankfurter or hot dog, turkey
25210610	Frankfurter or hot dog, beef, lowfat
25210700	Frankfurter or hot dog, meat & poultry, lowfat
25220010	Cold cut, NFS
25220100	Beef sausage, NFS
25220110	Beef sausage, brown and serve, links, cooked
25220120	Beef sausage, smoked, stick
25220130	Beef sausage, smoked
25220140	Beef sausage, fresh, bulk, patty or link, cooked
25220150	Beef sausage with cheese, smoked
25220350	Bratwurst, cooked
25220360	Bratwurst, with cheese
25220390	Bologna, beef, lowfat
25220400	Bologna, pork and beef
25220410	Bologna, NFS
25220420	Bologna, Lebanon
25220430	Bologna, beef
25220440	Bologna, turkey
25220460	Bologna, pork
25220470	Bologna, beef, lower sodium
25220480	Bologna, chicken, beef, and pork
25220500	Bologna, beef and pork, lowfat
25220510	Capicola
25220650	Chicken and beef sausage, smoked
25220710	Chorizos
25220910	Head cheese
25221110	Knockwurst
25221210	Mortadella

25221250	Pepperoni
25221310	Polish sausage
25221350	Italian sausage
25221400	Sausage (not cold cut), NFS
25221410	Pork sausage, fresh, bulk, patty or link, cooked
25221420	Pork sausage, brown and serve, cooked
25221430	Pork sausage, country style, fresh, cooked
25221450	Pork sausage rice links, brown and serve, cooked
25221460	Pork and beef sausage
25221470	Pork and beef sausage, brown and serve, cooked
25221500	Salami, NFS
25221510	Salami, soft, cooked
25221520	Salami, dry or hard
25221530	Salami, beef
25221610	Scrapple, cooked
25221650	Smoked link sausage, pork
25221660	Smoked link sausage, pork and beef
25221680	Smoked sausage, pork
25221810	Thuringer
25221870	Turkey and pork sausage, fresh, bulk, patty or link, cooked
25221910	Vienna sausage, canned
25221920	Vienna sausage, chicken, canned
25221950	Pickled sausage
25230110	Luncheon meat, NFS
25230210	Ham, sliced, prepackaged or deli, luncheon meat
25230220	Ham, sliced, low salt, prepackaged or deli, luncheon meat
25230230	Ham, sliced, extra lean, prepackaged or deli, luncheon meat
25230430	Ham and cheese loaf
25230450	Honey loaf
25230510	Ham, luncheon meat, chopped, minced, pressed, spiced, not canned
25230520	Ham, luncheon meat, chopped, minced, pressed, spiced, lowfat, not canned
25230530	Ham and pork, luncheon meat, chopped, minced, pressed, spiced, canned
25230540	Ham, pork and chicken, luncheon meat, chopped, minced, pressed, spiced, canned
25230550	Ham, pork, and chicken, luncheon meat, chopped, minced, pressed, spiced, canned, reduced sodium
25230560	Liverwurst
25230610	Luncheon loaf (olive, pickle, or pimienta)
25230710	Sandwich loaf, luncheon meat
25231110	Beef, sliced, prepackaged or deli, luncheon meat
25240000	Meat spread or potted meat, NFS
25240220	Ham salad spread
25240310	Roast beef spread
27111500	Beef sloppy joe (no bun)*
27112010	Salisbury steak with gravy (mixture)*
27113200	Creamed chipped or dried beef*
27113300	Swedish meatballs with cream or white sauce (mixture)*
27118110	Meatballs, Puerto Rican style (Albondigas guisadas)*
27118120	Stewed seasoned ground beef, Puerto Rican style (Picadillo guisado, picadillo de carne)*
27118180	Puerto Rican style beef stew, meat with gravy (potatoes reported separately)*
27120030	Ham or pork with barbecue sauce (mixture)*
27120080	Ham stroganoff*
27120100	Ham or pork with tomato-based sauce (mixture)*
27120110	Sausage with tomato-based sauce (mixture)*
27120120	Sausage gravy*
27120150	Pork or ham with soy-based sauce (mixture)*
27120210	Frankfurter or hot dog, with chili, no bun*
27120250	Frankfurters or hot dogs with tomato-based sauce (mixture)*
27133010	Stewed goat, Puerto Rican style (Cabrito en fricase, chilindron de chivo)*

27146250	Chicken or turkey cordon bleu*
27160100	Meatballs, NS as to type of meat, with sauce (mixture)*
27214110	Meat loaf made with beef, with tomato-based sauce*
27218210	Puerto Rican style beef stew with potatoes (Carne guisada con papas)*
27218310	Stewed corned beef, Puerto Rican style ("Corned beef" guisado)*
27220010	Meat loaf made with ham (not luncheon meat)*
27220020	Ham and noodles with cream or white sauce (mixture)*
27220030	Ham and rice with (mushroom) soup (mixture)*
27220050	Ham or pork with stuffing (mixture)*
27220080	Ham croquette*
27220120	Sausage and rice with tomato-based sauce (mixture)*
27220150	Sausage and rice with (mushroom) soup (mixture)*
27220170	Sausage and rice with cheese sauce (mixture)*
27220190	Sausage and noodles with cream or white sauce (mixture)*
27220210	Ham and noodles, no sauce (mixture)*
27220310	Ham or pork and rice, no sauce (mixture)*
27220510	Ham or pork and potatoes with gravy (mixture)*
27220520	Ham or pork and potatoes with cheese sauce (mixture)*
27260010	Meat loaf, NS as to type of meat*
27260050	Meatballs, with breading, NS as to type of meat, with gravy*
27260080	Meat loaf made with beef and pork*
27260090	Meat loaf made with beef, veal and pork*
27260100	Meat loaf made with beef and pork, with tomato-based sauce*
27260500	Vienna sausages stewed with potatoes, Puerto Rican style (Salchichas guisadas)*
27311210	Corned beef, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), no sauce (mixture)*
27311220	Corned beef, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), no sauce (mixture)*
27320020	Ham pot pie*
27320030	Ham or pork, noodles and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)*
27320070	Ham or pork, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27320080	Sausage, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce*
27320120	Sausage, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27320130	Sausage, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27320410	Ham, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), no sauce (mixture)*
27348100	Chicken fricassee, Puerto Rican style (Fricase de pollo)*
27350020	Paella with seafood*
27350030	Seafood stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-base sauce*
27350310	Seafood stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-base sauce*
27360090	Paella, NFS*
27360120	Chow mein or chop suey, various types of meat, with noodles*
27363100	Jambalaya with meat and rice*
27411150	Beef rolls, stuffed with vegetables or meat mixture, tomato-based sauce*
27418310	Corned beef with tomato sauce and onion, Puerto Rican style (mixture)*
27420010	Cabbage with ham hocks (mixture)*
27420020	Ham or pork salad*
27420080	Greens with ham or pork (mixture)*
27420250	Ham and vegetables (including carrots, broccoli, and/or dark- green leafy (no potatoes)), no sauce (mixture)*
27420450	Sausage and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)),

	tomato-based sauce (mixture)*
27420460	Sausage and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27420470	Sausage and peppers, no sauce (mixture)*
27421010	Stuffed christophine, Puerto Rican style (Chayote relleno)*
27446320	Chicken or turkey (breaded, fried) garden salad with bacon (chicken and/or turkey, bacon, cheese, lettuce and/or greens, tomato and/or carrots, other vegetables), no dressing*
27460490	Julienne salad (meat, cheese, eggs, vegetables), no dressing*
27460510	Antipasto with ham, fish, cheese, vegetables*
27500050	Sandwich, NFS*
27510110	Beef barbecue sandwich or Sloppy Joe, on bun*
27510210	Cheeseburger, plain, on bun*
27510220	Cheeseburger, with mayonnaise or salad dressing, on bun*
27510230	Cheeseburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510240	Cheeseburger, 1/4 lb meat, plain, on bun*
27510250	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing, on bun*
27510260	Cheeseburger, 1/4 lb meat, with mushrooms in sauce, on bun*
27510280	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on bun*
27510290	Double cheeseburger (2 patties), plain, on double-decker bun*
27510300	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on double-decker bun
27510310	Cheeseburger with tomato and/or catsup, on bun
27510311	Cheeseburger, 1 oz meat, plain, on miniature bun*
27510320	Cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun
27510330	Double cheeseburger (2 patties), with tomato and/or catsup, on bun*
27510340	Double cheeseburger (2 patties), with mayonnaise or salad dressing and tomatoes, on bun*
27510350	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun
27510360	Cheeseburger with mayonnaise or salad dressing, tomato and bacon, on bun*
27510370	Double cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510375	Double cheeseburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510380	Triple cheeseburger (3 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510390	Double bacon cheeseburger (2 patties, 1/4 lb meat each), on bun*
27510400	Bacon cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510410	Chiliburger, on bun*
27510420	Taco burger, on bun*
27510425	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510430	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510440	Bacon cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510450	Cheeseburger, 1/4 lb meat, with ham, on bun*
27510500	Hamburger, plain, on bun*
27510510	Hamburger, with tomato and/or catsup, on bun
27510520	Hamburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510530	Hamburger, 1/4 lb meat, plain, on bun*
27510540	Double hamburger (2 patties), with tomato and/or catsup, on bun*
27510550	Double hamburger (2 patties), with mayonnaise or salad dressing and tomatoes, on double-decker bun*
27510560	Hamburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun
27510590	Hamburger, with mayonnaise or salad dressing, on bun*
27510600	Hamburger, 1 oz meat, plain, on miniature bun*
27510620	Hamburger, 1/4 lb meat, with tomato and/or catsup, on bun
27510680	Double hamburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510690	Double hamburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes and/or catsup, on double-decker bun
27510700	Meatball and spaghetti sauce submarine sandwich*
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread*
27511010	Pastrami sandwich*

27520130	Bacon, chicken, and tomato club sandwich, with lettuce and spread*
27520150	Bacon, lettuce, and tomato sandwich with spread*
27520160	Bacon, chicken, and tomato club sandwich, on multigrain roll with lettuce and spread*
27520165	Bacon, chicken fillet (breaded, fried), and tomato club with lettuce and spread*
27520300	Ham sandwich, with spread*
27520310	Ham sandwich with lettuce and spread*
27520320	Ham and cheese sandwich, with lettuce and spread*
27520330	Ham and egg sandwich*
27520350	Ham and cheese sandwich, with spread, grilled*
27520360	Ham and cheese sandwich, on bun, with lettuce and spread*
27520370	Hot ham and cheese sandwich, on bun*
27520390	Ham and cheese submarine sandwich, on multigrain roll, with lettuce, tomato and spread*
27540350	Turkey submarine sandwich, with cheese, lettuce, tomato and spread*
27541000	Turkey, ham, and roast beef club sandwich*
27560110	Bologna sandwich, with spread*
27560300	Corn dog (frankfurter or hot dog with cornbread coating)*
27560320	Frankfurter or hot dog, plain, on bun*
27560330	Frankfurter or hot dog, with cheese, plain, on bun*
27560340	Frankfurter or hot dog, with catsup and/or mustard, on bun*
27560350	Pig in a blanket (frankfurter or hot dog wrapped in dough)*
27560360	Frankfurter or hot dog, with chili, on bun*
27560370	Frankfurter or hot dog with chili and cheese, on bun*
27560510	Salami sandwich, with spread*
27560705	Sausage balls (made with biscuit mix and cheese)*
27560710	Sausage sandwich*
27560910	Submarine, cold cut sandwich, with lettuce and tomato*
28120310	Pork with rice, vegetable, in soy-based sauce (diet frozen meal)*
28320120	Pork vegetable soup with noodles, stew type, chunky style*
28320140	Ham, noodle, and vegetable soup, Puerto Rican style*
28320150	Pork, vegetable soup with potatoes, stew type*
28321130	Bacon soup, cream of, prepared with water*
28340210	Chicken rice soup, Puerto Rican style (Sopa de pollo con arroz)*
28340220	Chicken soup with noodles and potatoes, Puerto Rican style*
28340700	Bird's nest soup (chicken, ham, and noodles)*
28350050	Fish chowder*
32101500	Egg, Benedict*
32105030	Egg omelet or scrambled egg, with ham or bacon*
32105060	Egg omelet or scrambled egg, with peppers, onion, and ham*
32105080	Egg omelet or scrambled egg, with cheese and ham or bacon*
32105085	Egg omelet or scrambled egg, with cheese, ham or bacon, and tomatoes*
32105120	Egg omelet or scrambled egg, with sausage and mushrooms*
32105121	Egg omelet or scrambled egg, with sausage and cheese*
32105122	Egg omelet or scrambled egg, with sausage*
32105125	Egg omelet or scrambled egg, with hot dogs*
32105160	Egg omelet or scrambled egg, with chorizo*
32105190	Egg casserole with bread, cheese, milk and meat*
32105330	Scrambled eggs with jerked beef, Puerto Rican style (Revoltillo de tasajo)*
32202010	Egg, cheese, and ham on English muffin*
32202035	Egg, cheese, and sausage on bun*
32202085	Egg, cheese and bacon on bagel*
35001000	Scrambled eggs, sausage, hash brown potatoes (frozen meal)*
35002000	Scrambled eggs, bacon, home fried potatoes (frozen meal)*
41201010	Baked beans, NFS*
41204020	Boston baked beans*
41205030	Refried beans with meat*
41208100	Beans, dry, cooked with pork*
41210090	Stewed beans with pork, tomatoes, and chili peppers, Mexican style (Frijoles a la charra)*
41210100	Stewed dry red beans, Puerto Rican style (Habichuelas coloradas guisadas)*



41210150	Stewed pink beans with white potatoes and ham, Puerto Rican style*
41210190	Stewed red beans with pig's feet and potatoes, Puerto Rican style*
41304130	Cowpeas, dry, cooked with pork*
41310100	Stewed pigeon peas, Puerto Rican style (Gandules guisados, Gandur, Gandules)*
41601060	Bean soup, with macaroni and meat*
41601110	Bean and ham soup, chunky style*
41601180	Bean and ham soup, home recipe*
41610100	White bean soup, Puerto Rican style (Sopon de habichuelas blancas)*
58100340	Burrito with eggs, sausage, cheese and vegetables*
58100560	Enchilada with ham and cheese, no beans*
58106500	Pizza with meat, prepared from frozen, thin crust*
58106505	Pizza with meat, prepared from frozen, thick crust*
58106510	Pizza with meat, NS as to type of crust*
58106520	Pizza with meat, thin crust*
58106530	Pizza with meat, thick crust*
58106550	Pizza with pepperoni, thin crust*
58106610	Pizza with meat other than pepperoni, NS as to type of crust*
58106620	Pizza with meat other than pepperoni, thin crust*
58106625	Pizza with meat other than pepperoni, regular crust*
58106630	Pizza with meat other than pepperoni, thick crust*
58106640	Pizza with extra meat, NS as to type of crust*
58106650	Pizza with extra meat, thin crust*
58106655	Pizza with extra meat, regular crust*
58106660	Pizza with extra meat, thick crust*
58106710	Pizza with meat and vegetables, NS as to type of crust*
58106720	Pizza with meat and vegetables, thin crust*
58106730	Pizza with meat and vegetables, thick crust*
58106735	Pizza with extra meat and extra vegetables, NS as to type of crust*
58106736	Pizza with extra meat and extra vegetables, thin crust*
58106737	Pizza with extra meat and extra vegetables, thick crust*
58106738	Pizza with extra meat and extra vegetables, regular crust*
58106740	Pizza with meat and fruit, NS as to type of crust*
58106750	Pizza with meat and fruit, thin crust*
58106755	Pizza with meat and fruit, regular crust*
58106760	Pizza with meat and fruit, thick crust*
58106780	Pizza with meat and vegetables, lowfat, thin crust*
58108010	Calzone, with meat and cheese*
58108050	Pizza rolls*
58116110	Meat turnover, Puerto Rican style (Pastelillo de carne; Empanadilla)*
58116210	Meat pie, Puerto Rican style (Pastelon de carne)*
58125110	Quiche with meat, poultry or fish*
58126150	Turnover, meat- and cheese-filled, tomato-based sauce*
58126270	Turnover, chicken- or turkey-, and cheese-filled, no gravy*
58126300	Turnover, meat- and cheese-filled, tomato-based sauce, lower in fat*
58126400	Turnover, filled with egg, meat and cheese*
58127210	Croissant sandwich, filled with ham and cheese*
58127270	Croissant sandwich with sausage and egg*
58127290	Croissant sandwich with bacon and egg*
58127310	Croissant sandwich with ham, egg, and cheese*
58127330	Croissant sandwich with sausage, egg, and cheese*
58127350	Croissant sandwich with bacon, egg, and cheese*
58128000	Biscuit with gravy*
58128250	Dressing with meat and vegetables*
58132710	Spaghetti with tomato sauce and frankfurters or hot dogs*
58134610	Tortellini, meat-filled, with tomato sauce*
58134650	Tortellini, meat-filled, no sauce*
58134710	Tortellini, spinach-filled, with tomato sauce*
58134720	Tortellini, spinach-filled, no sauce*

58145150	Macaroni or noodles with cheese and pork or ham*
58145160	Macaroni or noodles with cheese and frankfurters or hot dogs*
58146130	Pasta with carbonara sauce*
58148550	Pasta or macaroni salad with meat*
58155310	Paella, Valenciana style, with meat (Paella Valenciana)*
58155510	Soupy rice mixture with chicken and potatoes, Puerto Rican style*
58155810	Stewed rice, Puerto Rican style (arroz quisado)*
58156210	Rice with vienna sausage, Puerto Rican style (arroz con salchichas)*
58156310	Rice with Spanish sausage, Puerto Rican style*
58156610	Pigeon pea asopao (Asopao de gandules)*
58156710	Rice with stewed beans, Puerto Rican style*
58160160	Hopping John (black-eyed peas and rice)*
58310210	Sausage and french toast (frozen meal)*
58310310	Pancakes and sausage (frozen meal)*
71106000	Stewed potatoes, Puerto Rican style (Papas guisadas)*
71301120	White potato, cooked, with ham and cheese*
71305110	White potato, scalloped, with ham*
71411000	White potato skins, with adhering flesh, fried, with cheese and bacon*
71508060	White potato, stuffed, baked, peel eaten, stuffed with bacon and cheese*
71508070	White potato, stuffed, baked, peel not eaten, stuffed with bacon and cheese*
71602010	Potato salad, German style*
71803010	Potato chowder*
75144100	Lettuce, wilted, with bacon dressing*
75414020	Mushrooms, stuffed*
75651000	Minestrone soup, home recipe*
75656010	Vegetable soup, Spanish style, stew type*
77121010	Fried stuffed potatoes, Puerto Rican style (Rellenos de papas)*
77205610	Ripe plantain meat pie, Puerto Rican style (Pinon)*
77230210	Cassava Pasteles, Puerto Rican style (Pasteles de yuca)*
77316010	Stuffed cabbage, with meat, Puerto Rican style (Repollo relleno con carne)*
77513010	Spanish stew, Puerto Rican style (Cocido Espanol)*
83101500	Bacon dressing (hot)*

**Poultry products**

Food Code	Food Description
24198570	Chicken, canned, meat only
24198740	Chicken nuggets
24201500	Turkey, light or dark meat, smoked, cooked, NS as to skin eaten
24201510	Turkey, light or dark meat, smoked, cooked, skin eaten
24201520	Turkey, light or dark meat, smoked, cooked, skin not eaten
24202120	Turkey, drumstick, smoked, cooked, skin eaten
25221840	Turkey breakfast sausage, bulk
25221850	Turkey sausage, smoked
25221860	Turkey sausage, reduced fat, brown and serve, cooked
25221880	Turkey, pork, and beef sausage, reduced fat, smoked
25221890	Turkey, pork, and beef sausage, lowfat, smoked
25230310	Chicken or turkey loaf, prepackaged or deli, luncheon meat
25230790	Turkey ham, sliced, extra lean, prepackaged or deli, luncheon meat
25230800	Turkey ham
25230820	Turkey pastrami
25230840	Turkey salami
25230900	Turkey or chicken breast, prepackaged or deli, luncheon meat
25230905	Turkey or chicken breast, low salt, prepackaged or deli, luncheon meat
25240110	Chicken salad spread

**Processing aid**

**Salads**

Food Code	Food Description
25240110	Chicken salad spread

25240220	Ham salad spread
27416250	Beef salad
27420020	Ham or pork salad
27446200	Chicken or turkey salad
27446205	Chicken or turkey salad with nuts and/or fruits
27446220	Chicken or turkey salad with egg
27450010	Crab salad
27450020	Lobster salad
27450030	Salmon salad
27450060	Tuna salad
27450070	Shrimp salad
27450080	Seafood salad
27450090	Tuna salad with cheese
27450100	Tuna salad with egg
27450130	Crab salad made with imitation crab
27540120	Chicken salad or chicken spread sandwich*
27550720	Tuna salad sandwich*
27550750	Tuna salad submarine sandwich, with lettuce and tomato*
32103000	Egg salad
58148110	Macaroni or pasta salad
58148120	Macaroni or pasta salad with egg
58148130	Macaroni or pasta salad with tuna
58148140	Macaroni or pasta salad with crab meat
58148150	Macaroni or pasta salad with shrimp
58148160	Macaroni or pasta salad with tuna and egg
58148170	Macaroni or pasta salad with chicken
58148180	Macaroni or pasta salad with cheese
58148500	Pasta or macaroni salad with oil and vinegar-type dressing
58148550	Pasta or macaroni salad with meat
63401010	Apple salad with dressing
63401015	Apple and grape salad with yogurt and walnuts
63401030	Apple and fruit salad with dressing
63402950	Fruit salad (excluding citrus fruits) with salad dressing or mayonnaise
63402960	Fruit salad (excluding citrus fruits) with cream
63402970	Fruit salad (excluding citrus fruits) with cream substitute
63402980	Fruit salad (excluding citrus fruits) with marshmallows
63402990	Fruit salad (including citrus fruits) with pudding
63403000	Fruit salad (excluding citrus fruits) with pudding
63403010	Fruit salad (including citrus fruits) with salad dressing or mayonnaise
63403020	Fruit salad (including citrus fruit) with cream
63403040	Fruit salad (including citrus fruits) with marshmallows
63411010	Cranberry salad, congealed
63413010	Pineapple salad with dressing
71601010	Potato salad with egg
71602010	Potato salad, German style
71603010	Potato salad
73101110	Carrots, raw, salad
74506000	Tomato and cucumber salad made with tomato, cucumber, oil, and vinegar
75140500	Broccoli salad with cauliflower, cheese, bacon bits, and dressing
75141000	Cabbage salad or coleslaw, with dressing
75141100	Cabbage salad or coleslaw with apples and/or raisins, with dressing
75141200	Cabbage salad or coleslaw with pineapple, with dressing
75142500	Cucumber salad with creamy dressing
75142550	Cucumber salad made with cucumber, oil, and vinegar
75142600	Cucumber salad made with cucumber and vinegar
75201030	Artichoke salad in oil
75302080	Bean salad, yellow and/or green string beans
75416500	Pea salad

75416600	Pea salad with cheese
91501100	Gelatin salad with vegetables
91511100	Gelatin salad, dietetic, with vegetables, sweetened with low calorie sweetener

**Sauces**

Food Code	Food Description
13411000	White sauce, milk sauce
13412000	Milk gravy, quick gravy
14620300	Topping from cheese pizza*
14620310	Topping from vegetable pizza*
14620320	Topping from meat pizza*
14620330	Topping from meat and vegetable pizza*
14650100	Cheese sauce
14650160	Alfredo sauce
21304200	Beef, shortribs, barbecued, with sauce, NS as to fat eaten*
21304210	Beef, shortribs, barbecued, with sauce, lean and fat eaten*
21304220	Beef, shortribs, barbecued, with sauce, lean only eaten*
22701030	Pork, spareribs, barbecued, with sauce, NS as to fat eaten*
22701040	Pork, spareribs, barbecued, with sauce, lean and fat eaten*
22701050	Pork, spareribs, barbecued, with sauce, lean only eaten*
27111000	Beef with tomato-based sauce (mixture)*
27111050	Spaghetti sauce with beef or meat other than lamb or mutton, homemade-style
27111300	Mexican style beef stew, no potatoes, tomato-based sauce (mixture) (Carne guisada sin papas)*
27111310	Mexican style beef stew, no potatoes, with chili peppers, tomato-based sauce (mixture) (Carne guisada con chile)*
27111500	Beef sloppy joe (no bun)*
27112000	Beef with gravy (mixture)*
27112010	Salisbury steak with gravy (mixture)*
27113000	Beef with cream or white sauce (mixture)*
27113300	Swedish meatballs with cream or white sauce (mixture)*
27115000	Beef with soy-based sauce (mixture)*
27115100	Steak teriyaki with sauce (mixture)*
27116100	Beef curry*
27116200	Beef with barbecue sauce (mixture)*
27116300	Beef with sweet and sour sauce (mixture)*
27118180	Puerto Rican style beef stew, meat with gravy (potatoes reported separately)*
27120020	Ham or pork with gravy (mixture)*
27120030	Ham or pork with barbecue sauce (mixture)*
27120060	Sweet and sour pork*
27120080	Ham stroganoff*
27120100	Ham or pork with tomato-based sauce (mixture)*
27120110	Sausage with tomato-based sauce (mixture)*
27120120	Sausage gravy
27120130	Mexican style pork stew, no potatoes, tomato-based sauce (mixture) (cerdo guisado sin papas)*
27120150	Pork or ham with soy-based sauce (mixture)*
27120250	Frankfurters or hot dogs with tomato-based sauce (mixture)*
27130100	Lamb curry*
27135010	Veal with gravy (mixture)*
27135110	Veal parmigiana*
27136050	Venison/deer with tomato-based sauce (mixture)*
27141000	Chicken or turkey cacciatore*
27141030	Spaghetti sauce with poultry, home-made style*
27141050	Stewed chicken with tomato-based sauce, Mexican style (mixture) (Pollo guisado con tomate)*
27142000	Chicken with gravy (mixture)*
27142100	Chicken or turkey fricassee*
27142200	Turkey with gravy (mixture)*
27143000	Chicken or turkey with cream sauce (mixture)*
27145000	Chicken or turkey teriyaki (chicken or turkey with soy-based sauce)*
27146000	Chicken or turkey with barbecue sauce (mixture), skin eaten*

27146010	Chicken or turkey with barbecue sauce (mixture), skin not eaten*
27146050	Chicken wing with hot pepper sauce*
27146100	Sweet and sour chicken or turkey*
27146150	Chicken curry*
27146160	Chicken with mole sauce*
27146200	Chicken or turkey with cheese sauce (mixture)*
27146250	Chicken or turkey cordon bleu*
27146300	Chicken or turkey parmigiana*
27146350	Lemon chicken, Chinese style*
27150010	Fish with cream or white sauce, not tuna or lobster (mixture)*
27150110	Shrimp cocktail (shrimp with cocktail sauce)*
27150120	Tuna with cream or white sauce (mixture)*
27150130	Seafood newburg*
27150140	Clam sauce, white
27150160	Shrimp with lobster sauce (mixture)*
27150170	Sweet and sour shrimp*
27150200	Oyster sauce (white sauce-based)*
27150210	Fish sauce (bagoong)
27150310	Fish with tomato-based sauce (mixture)*
27150320	Fish curry*
27150330	Mussels with tomato-based sauce (mixture)*
27150350	Sardines with tomato-based sauce (mixture)*
27150370	Sardines with mustard sauce (mixture)*
27150410	Shrimp teriyaki (shrimp with soy-based sauce) (mixture)*
27150510	Scallops with cheese sauce (mixture)*
27151040	Crabs in tomato-based sauce, Puerto Rican style (mixture) (Salmorejo de jueyes)*
27151050	Shrimp in garlic sauce, Puerto Rican style (mixture) (Camarones al ajillo)*
27160010	Meat with barbecue sauce, NS as to type of meat (mixture)*
27160100	Meatballs, NS as to type of meat, with sauce (mixture)*
27162010	Meat with tomato-based sauce (mixture)*
27162050	Spaghetti sauce with combination of meats, homemade-style
27162060	Spaghetti sauce with meat and vegetables, homemade-style
27211100	Beef stew with potatoes, tomato-based sauce (mixture)*
27211110	Mexican style beef stew with potatoes, tomato-based sauce (mixture) (Carne guisada con papas)*
27211190	Beef and potatoes with cream sauce, white sauce or mushroom soup-based sauce (mixture)*
27211200	Beef stew with potatoes, gravy*
27211500	Beef and potatoes with cheese sauce (mixture)*
27212050	Beef and macaroni with cheese sauce (mixture)*
27212100	Beef and noodles with tomato-based sauce (mixture)*
27212150	Beef goulash with noodles*
27212200	Beef and noodles with gravy (mixture)*
27212300	Beef and noodles with cream or white sauce (mixture)*
27213100	Beef and rice with tomato-based sauce (mixture)*
27213120	Porcupine balls with tomato-based sauce (mixture)*
27213200	Beef and rice with gravy (mixture)*
27213300	Beef and rice with cream sauce (mixture)*
27213600	Beef and rice with cheese sauce (mixture)*
27214110	Meat loaf made with beef, with tomato-based sauce*
27220020	Ham and noodles with cream or white sauce (mixture)*
27220110	Pork and rice with tomato-based sauce (mixture)*
27220120	Sausage and rice with tomato-based sauce (mixture)*
27220170	Sausage and rice with cheese sauce (mixture)*
27220190	Sausage and noodles with cream or white sauce (mixture)*
27220510	Ham or pork and potatoes with gravy (mixture)*
27220520	Ham or pork and potatoes with cheese sauce (mixture)*
27221150	Mexican style pork stew, with potatoes, tomato-based sauce (mixture) (cerdo guisado con papas)*

27231000	Lamb or mutton and potatoes with gravy (mixture)*
27236000	Venison/deer and noodles with cream or white sauce (mixture)*
27241010	Chicken or turkey and potatoes with gravy (mixture)*
27242200	Chicken or turkey and noodles with gravy (mixture)*
27242300	Chicken or turkey and noodles with cream or white sauce (mixture)*
27242310	Chicken or turkey and noodles with cheese sauce (mixture)*
27242350	Chicken or turkey tetrazzini*
27242400	Chicken or turkey and noodles, tomato-based sauce (mixture)*
27243300	Chicken or turkey and rice with cream sauce (mixture)*
27243500	Chicken or turkey and rice with tomato-based sauce (mixture)*
27250110	Scallops and noodles with cheese sauce (mixture)*
27250126	Shrimp and noodles with cream or white sauce (mixture)*
27250130	Shrimp and noodles with cheese sauce (mixture)*
27250132	Shrimp and noodles with tomato sauce (mixture)*
27250610	Tuna noodle casserole with cream or white sauce*
27250810	Fish and rice with tomato-based sauce*
27250820	Fish and rice with cream sauce*
27250950	Shellfish mixture and noodles, tomato-based sauce (mixture)*
27260050	Meatballs, with breading, NS as to type of meat, with gravy*
27260100	Meat loaf made with beef and pork, with tomato-based sauce*
27311310	Beef stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce*
27311320	Beef stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce*
27311410	Beef stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy*
27311420	Beef stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy*
27311630	Beef, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27311635	Beef, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), cheese sauce (mixture)*
27311640	Beef, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)*
27313210	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27313220	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27313410	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27313420	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27315210	Beef, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27315220	Beef, rice, and vegetables (excluding carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27315340	Beef, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)*
27315410	Beef, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27315420	Beef, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27320030	Ham or pork, noodles and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)*
27320070	Ham or pork, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27320080	Sausage, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce*
27320100	Pork, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*

27320110	Pork, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27320120	Sausage, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27320130	Sausage, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27320140	Pork, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27320150	Pork, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27320340	Pork, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27320350	Pork, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27320500	Sweet and sour pork with rice*
27330030	Lamb or mutton stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy*
27330050	Lamb or mutton, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27330060	Lamb or mutton, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27330110	Lamb or mutton stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy*
27330210	Lamb or mutton stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce*
27330220	Lamb or mutton stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce*
27336100	Venison/deer stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce*
27336200	Venison/deer, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27336250	Venison/deer, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27336310	Venison/deer, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27341000	Chicken or turkey, potatoes, corn, and cheese, with gravy*
27341055	Chicken or turkey, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27341060	Chicken or turkey, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27341310	Chicken or turkey stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy*
27341320	Chicken or turkey stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy*
27341510	Chicken or turkey stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce*
27341520	Chicken or turkey stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce*
27343410	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27343420	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27343470	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), cream sauce, white sauce, or mushroom soup-based sauce (mixture)*
27343480	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and/or dark-green leafy), cream sauce, white sauce, or mushroom soup-based sauce (mixture)*
27343510	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*

27343520	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27343950	Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), cheese sauce (mixture)*
27343960	Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)*
27345210	Chicken or turkey, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27345220	Chicken or turkey, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27345410	Chicken or turkey, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), cream sauce, white sauce, or mushroom soup-based sauce (mixture)*
27345420	Chicken or turkey, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), cream sauce, white sauce, or mushroom soup-based sauce (mixture)*
27345440	Chicken or turkey, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), cheese sauce (mixture)*
27345450	Chicken or turkey, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)*
27345510	Chicken or turkey, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27345520	Chicken or turkey, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)*
27347220	Chicken or turkey, stuffing, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27347230	Chicken or turkey, stuffing, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27347240	Chicken or turkey, dumplings, and vegetables (including carrots, broccoli, and/or dark green leafy), gravy (mixture)*
27347250	Chicken or turkey, dumplings, and vegetables (excluding carrots, broccoli, and dark green leafy), gravy (mixture)*
27350030	Seafood stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-base sauce*
27350080	Tuna noodle casserole with vegetables, cream or white sauce*
27350310	Seafood stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-base sauce*
27411100	Beef with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27411150	Beef rolls, stuffed with vegetables or meat mixture, tomato-based sauce*
27411200	Beef with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27415120	Beef, tofu, and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), soy-based sauce (mixture)*
27415220	Beef, tofu, and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), soy-based sauce (mixture)*
27416300	Beef taco filling: beef, cheese, tomato, taco sauce*
27416400	Sukiyaki (stir fried beef and vegetables in soy sauce)*
27416450	Beef and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), gravy (mixture)*
27416500	Beef and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), gravy (mixture)*
27418310	Corned beef with tomato sauce and onion, Puerto Rican style (mixture)*
27420370	Pork, tofu, and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), soy-based sauce (mixture)*
27420400	Pork and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27420410	Pork and vegetables (excluding carrots, broccoli, and dark- green leafy (no potatoes)), tomato-based sauce (mixture)*
27420450	Sausage and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)),



	tomato-based sauce (mixture)*
27420460	Sausage and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27430400	Lamb or mutton stew with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), gravy*
27430410	Lamb or mutton stew with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), gravy*
27442110	Chicken or turkey and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), gravy (mixture)*
27442120	Chicken or turkey and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), gravy (mixture)*
27445125	Chicken or turkey and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27445130	Chicken or turkey and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27445180	Moo Goo Gai Pan*
27446400	Chicken or turkey and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), cheese sauce (mixture)*
27446410	Chicken or turkey and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), cheese sauce (mixture)*
27450700	Fish and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27450710	Fish and vegetables (excluding carrots, broccoli, and dark- green leafy (no potatoes)), tomato-based sauce (mixture)*
27510110	Beef barbecue sandwich or Sloppy Joe, on bun*
27510310	Cheeseburger with tomato and/or catsup, on bun*
27510320	Cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510330	Double cheeseburger (2 patties), with tomato and/or catsup, on bun*
27510400	Bacon cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510420	Taco burger, on bun*
27510510	Hamburger, with tomato and/or catsup, on bun*
27510540	Double hamburger (2 patties), with tomato and/or catsup, on bun*
27510620	Hamburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510680	Double hamburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510700	Meatball and spaghetti sauce submarine sandwich*
27520500	Pork sandwich, on white roll, with onions, dill pickles and barbecue sauce*
27520510	Pork barbecue sandwich or Sloppy Joe, on bun*
27540130	Chicken barbecue sandwich*
27560330	Frankfurter or hot dog, with cheese, plain, on bun*
27560340	Frankfurter or hot dog, with catsup and/or mustard, on bun*
28110150	Beef with vegetable (diet frozen meal)*
28110220	Sirloin, chopped, with gravy, mashed potatoes, vegetable (frozen meal)*
28110270	Sirloin beef with gravy, potatoes, vegetable (frozen meal)*
28110300	Salisbury steak dinner, NFS (frozen meal)*
28110310	Salisbury steak with gravy, potatoes, vegetable (frozen meal)*
28110330	Salisbury steak with gravy, whipped potatoes, vegetable, dessert (frozen meal)*
28110350	Salisbury steak with gravy, potatoes, vegetable, dessert (frozen meal, large meat portion)*
28110370	Salisbury steak with gravy, macaroni and cheese, vegetable (frozen meal)*
28110380	Salisbury steak with gravy, macaroni and cheese (frozen meal)*
28110390	Salisbury steak, potatoes, vegetable, dessert (diet frozen meal)*
28110510	Beef, sliced, with gravy, potatoes, vegetable (frozen meal)*
28110620	Beef short ribs, boneless, with barbecue sauce, potatoes, vegetable (frozen meal)*
28110640	Meatballs, Swedish, in sauce, with noodles (frozen meal)*
28110660	Meatballs, Swedish, in gravy, with noodles (diet frozen meal)*
28113110	Salisbury steak, baked, with tomato sauce, vegetable (diet frozen meal)*
28113140	Beef with spaetzle or rice, vegetable (frozen meal)*
28120310	Pork with rice, vegetable, in soy-based sauce (diet frozen meal)*
28133110	Veal, breaded, with spaghetti, in tomato sauce (frozen meal)*

28140150	Chicken divan (frozen meal)*
28140320	Chicken and noodles with vegetable, dessert (frozen meal)*
28140730	Chicken patty, breaded, with tomato sauce and cheese, fettuccine alfredo, vegetable (frozen meal)*
28140740	Chicken patty, or nuggets, boneless, breaded, with pasta and tomato sauce, fruit, dessert (frozen meal)*
28141050	Chicken patty parmigiana, breaded, with vegetable (diet frozen meal)*
28141201	Teriyaki chicken with rice and vegetable (diet frozen meal)*
28141600	Chicken a la king with rice (frozen meal)*
28141610	Chicken and vegetables in cream or white sauce (diet frozen meal)*
28141650	Chicken and vegetables au gratin with rice-vegetable mixture (diet frozen entree)*
28143010	Chicken and vegetable entree with rice, Oriental (frozen meal)*
28143020	Chicken and vegetable entree with rice, Oriental (diet frozen meal)*
28143030	Chicken and vegetable entree, oriental (diet frozen meal)*
28143040	Chicken chow mein with rice (diet frozen meal)*
28143080	Chicken with noodles and cheese sauce (diet frozen meal)*
28143110	Chicken cacciatore with noodles (diet frozen meal)*
28143130	Chicken and vegetable entree with noodles (frozen meal)*
28143170	Chicken in cream sauce with noodles and vegetable (frozen meal)*
28143190	Chicken in mushroom sauce, white and wild rice, vegetable (frozen meal)*
28143200	Chicken in soy-based sauce, rice and vegetables (frozen meal)*
28143210	Chicken in orange sauce with almond rice (diet frozen meal)*
28143220	Chicken in barbecue sauce, with rice, vegetable and dessert, reduced fat and sodium (diet frozen meal)*
28144100	Chicken and vegetable entree with noodles and cream sauce (frozen meal)*
28145000	Turkey dinner, NFS (frozen meal)*
28145100	Turkey with dressing, gravy, vegetable and fruit (diet frozen meal)*
28145110	Turkey with vegetable, stuffing (diet frozen meal)*
28145210	Turkey with gravy, dressing, potatoes, vegetable (frozen meal)*
28145610	Turkey with gravy, dressing, potatoes, vegetable, dessert (frozen meal, large meat portion)*
28145710	Turkey tetrazzini (frozen meal)*
28150510	Fish in lemon-butter sauce with starch item, vegetable (frozen meal)*
28150650	Fish, breaded, or fish sticks, with pasta, vegetable and dessert (frozen meal)*
28152050	Shrimp with rice, vegetable (frozen meal)*
28153010	Shrimp and clams in tomato-based sauce, with noodles (frozen meal)*
28154010	Shrimp and vegetables in sauce with noodles (diet frozen meal)*
28160300	Meat loaf dinner, NFS (frozen meal)*
28160310	Meat loaf with potatoes, vegetable (frozen meal)*
28160650	Stuffed green pepper (frozen meal)*
28160710	Stuffed cabbage, with meat and tomato sauce (diet frozen meal)*
28500000	Gravy, poultry
28500010	Gravy, meat or poultry, with wine
28500040	Gravy, beef or meat
28500050	Gravy, giblet
28500070	Gravy, beef or meat, home recipe
28500080	Gravy, poultry, home recipe
28500100	Gravy, mushroom
28501010	Gravy, beef or meat, fat free
28501110	Gravy, poultry, fat free
28510010	Gravy or sauce, poultry-based from Puerto Rican-style chicken fricasse
28510030	Gravy, meat-based, from Puerto-Rican style beef stew
28520000	Gravy or sauce, Chinese (soy sauce, stock or bouillon, cornstarch)
28520100	Oyster-flavored sauce
28522000	Mole poblano (sauce)
28522050	Mole verde (sauce)
32105180	Huevos rancheros*
41202020	Chili beans, barbecue beans, ranch style beans or Mexican- style beans*
41205100	Black bean sauce

41420100	Miso sauce
41420250	Hoisin sauce
41420300	Soy sauce
41420350	Soy sauce, reduced sodium
41420400	Teriyaki sauce
41420410	Teriyaki sauce, reduced sodium
41420450	Worcestershire sauce
41812500	Tofu and vegetables (including carrots, broccoli, and/or dark-green leafy vegetables (no potatoes)), with soy-based sauce (mixture)*
41812510	Tofu and vegetables (excluding carrots, broccoli, and dark-green leafy vegetables (no potatoes)), with soy-based sauce (mixture)*
42204050	Peanut sauce
42204100	Brown nut gravy, meatless
43103100	Sesame sauce
55502000	Flour and water gravy
58100140	Burrito with beef, beans, cheese, and sour cream*
58100155	Burrito with beef, rice, and cheese*
58100160	Burrito with beef, beans, rice, and cheese*
58100240	Burrito with chicken, NFS*
58100245	Burrito with chicken, beans, cheese, and sour cream*
58100250	Burrito with chicken, rice, and cheese*
58100255	Burrito with chicken, beans, rice, and cheese*
58100600	Enchilada with chicken, tomato-based sauce*
58100610	Enchilada with chicken and beans, tomato-based sauce*
58100620	Enchilada with chicken, beans, and cheese, tomato-based sauce*
58100630	Enchilada with chicken and cheese, no beans, tomato-based sauce*
58100900	Enchilada with seafood, tomato-based sauce*
58101310	Taco or tostada with beef, lettuce, tomato and salsa*
58101320	Taco or tostada with beef, cheese, lettuce, tomato and salsa*
58101510	Taco or tostada with chicken or turkey, lettuce, tomato and salsa*
58101520	Taco or tostada with chicken, cheese, lettuce, tomato and salsa*
58101530	Soft taco with beef, cheese, lettuce, tomato and salsa*
58101540	Taco or tostada with fish, lettuce, tomato, salsa*
58101710	Taco or tostada with beans, meatless, with lettuce, tomato and salsa*
58101720	Taco or tostada with beans and cheese, meatless, with lettuce, tomato and salsa*
58101730	Taco or tostada with beans, cheese, meat, lettuce, tomato and salsa*
58101800	Ground beef with tomato sauce and taco seasonings on a cornbread crust*
58101820	Mexican casserole made with ground beef, beans, tomato sauce, cheese, taco seasonings, and corn chips*
58101830	Mexican casserole made with ground beef, tomato sauce, cheese, taco seasonings, and corn chips*
58104290	Chalupa with beef, cheese, lettuce, tomato and salsa*
58104340	Chalupa with chicken, cheese, lettuce, tomato and salsa*
58106200	Pizza, cheese, prepared from frozen, thin crust*
58106205	Pizza, cheese, prepared from frozen, thick crust*
58106210	Pizza, cheese, NS as to type of crust*
58106220	Pizza, cheese, thin crust*
58106225	Pizza, cheese, regular crust*
58106230	Pizza, cheese, thick crust*
58106240	Pizza, extra cheese, NS as to type of crust*
58106250	Pizza, extra cheese, thin crust*
58106260	Pizza, extra cheese, thick crust*
58106300	Pizza, cheese, with vegetables, prepared from frozen, thin crust*
58106305	Pizza, cheese with vegetables, prepared from frozen, thick crust*
58106310	Pizza, cheese, with vegetables, NS as to type of crust*
58106320	Pizza, cheese, with vegetables, thin crust*
58106325	Pizza, cheese, with vegetables, regular crust*
58106330	Pizza, cheese, with vegetables, thick crust*

58106345	Pizza with cheese and extra vegetables, thin crust*
58106350	Pizza with cheese and extra vegetables, thick crust*
58106360	Pizza, cheese, with fruit, thick crust*
58106500	Pizza with meat, prepared from frozen, thin crust*
58106505	Pizza with meat, prepared from frozen, thick crust*
58106510	Pizza with meat, NS as to type of crust*
58106520	Pizza with meat, thin crust*
58106530	Pizza with meat, thick crust*
58106540	Pizza with pepperoni, NS as to type of crust*
58106550	Pizza with pepperoni, thin crust*
58106555	Pizza with pepperoni, regular crust*
58106560	Pizza with pepperoni, thick crust*
58106610	Pizza with meat other than pepperoni, NS as to type of crust*
58106620	Pizza with meat other than pepperoni, thin crust*
58106625	Pizza with meat other than pepperoni, regular crust*
58106630	Pizza with meat other than pepperoni, thick crust*
58106640	Pizza with extra meat, NS as to type of crust*
58106650	Pizza with extra meat, thin crust*
58106655	Pizza with extra meat, regular crust*
58106660	Pizza with extra meat, thick crust*
58106700	Pizza with meat and vegetables, prepared from frozen, thin crust*
58106705	Pizza with meat and vegetables, prepared from frozen, thick crust*
58106710	Pizza with meat and vegetables, NS as to type of crust*
58106720	Pizza with meat and vegetables, thin crust*
58106725	Pizza with meat and vegetables, regular crust*
58106730	Pizza with meat and vegetables, thick crust*
58106735	Pizza with extra meat and extra vegetables, NS as to type of crust*
58106736	Pizza with extra meat and extra vegetables, thin crust*
58106737	Pizza with extra meat and extra vegetables, thick crust*
58106738	Pizza with extra meat and extra vegetables, regular crust*
58106740	Pizza with meat and fruit, NS as to type of crust*
58106750	Pizza with meat and fruit, thin crust*
58106755	Pizza with meat and fruit, regular crust*
58106760	Pizza with meat and fruit, thick crust*
58106780	Pizza with meat and vegetables, lowfat, thin crust*
58106820	Pizza with beans and vegetables, thin crust*
58106830	Pizza with beans and vegetables, thick crust*
58106910	Pizza with seafood, thin crust*
58106920	Pizza with seafood, thick crust*
58107030	Pizza, no cheese, NS as to type of crust*
58107050	Pizza, no cheese, thin crust*
58107060	Pizza, no cheese, regular crust*
58107100	Pizza, no cheese, thick crust*
58108050	Pizza rolls*
58113110	Dumpling, fried, pork*
58116110	Meat turnover, Puerto Rican style (Pastelillo de carne; Empanadilla)*
58120110	Crepes, filled with meat, fish, or poultry, with sauce*
58126130	Turnover, meat- and cheese-filled, no gravy*
58126150	Turnover, meat- and cheese-filled, tomato-based sauce*
58126270	Turnover, chicken- or turkey-, and cheese-filled, no gravy*
58126300	Turnover, meat- and cheese-filled, tomato-based sauce, lower in fat*
58126310	Turnover, chicken, with gravy*
58128000	Biscuit with gravy*
58130011	Lasagna with meat*
58130013	Lasagna with meat, canned*
58130020	Lasagna with meat and spinach*
58130140	Lasagna with chicken or turkey*
58130310	Lasagna, meatless*

58130320	Lasagna, meatless, with vegetables*
58131110	Ravioli, NS as to filling, with tomato sauce*
58131320	Ravioli, meat-filled, with tomato sauce or meat sauce*
58131323	Ravioli, meat-filled, with tomato sauce or meat sauce, canned*
58131520	Ravioli, cheese-filled, with tomato sauce*
58131523	Ravioli, cheese-filled, with tomato sauce, canned*
58131530	Ravioli, cheese-filled, with meat sauce*
58131535	Ravioli, cheese-filled, with cream sauce*
58131600	Ravioli, cheese and spinach-filled, with cream sauce*
58131610	Ravioli, cheese and spinach filled, with tomato sauce*
58132110	Spaghetti with tomato sauce, meatless*
58132113	Pasta with tomato sauce and cheese, canned*
58132310	Spaghetti with tomato sauce and meatballs or spaghetti with meat sauce or spaghetti with meat sauce and meatballs*
58132313	Pasta with tomato sauce and meat or meatballs, canned*
58132340	Spaghetti with tomato sauce and vegetables*
58132350	Spaghetti with tomato sauce, meatless, whole wheat noodles*
58132360	Spaghetti with tomato sauce and meatballs, whole wheat noodles or spaghetti with meat sauce, whole wheat noodles or spaghetti with meat sauce and meatballs, whole wheat noodles*
58132450	Spaghetti with tomato sauce, meatless, made with spinach noodles*
58132460	Spaghetti with tomato sauce and meatballs made with spinach noodles, or spaghetti with meat sauce made with spinach noodles, or spaghetti with meat sauce and meatballs made with spinach noodles*
58132710	Spaghetti with tomato sauce and frankfurters or hot dogs*
58132713	Pasta with tomato sauce and frankfurters or hot dogs, canned*
58132800	Spaghetti with clam sauce, NS as to red or white*
58132810	Spaghetti with red clam sauce*
58132820	Spaghetti with white clam sauce*
58132910	Spaghetti with tomato sauce and chicken or turkey*
58133120	Manicotti, cheese-filled, with tomato sauce, meatless*
58133130	Manicotti, cheese-filled, with meat sauce*
58133140	Manicotti, vegetable- and cheese-filled, with tomato sauce, meatless*
58134110	Stuffed shells, cheese-filled, no sauce*
58134120	Stuffed shells, cheese-filled, with tomato sauce, meatless*
58134130	Stuffed shells, cheese-filled, with meat sauce*
58134210	Stuffed shells, with chicken, with tomato sauce*
58134610	Tortellini, meat-filled, with tomato sauce*
58134620	Tortellini, cheese-filled, meatless, with tomato sauce*
58134623	Tortellini, cheese-filled, meatless, with tomato sauce, canned*
58134660	Tortellini, cheese-filled, with cream sauce*
58134710	Tortellini, spinach-filled, with tomato sauce*
58145115	Macaroni or noodles with cheese, from boxed mix with already prepared cheese sauce*
58145140	Macaroni or noodles with cheese and tomato*
58146100	Pasta with tomato sauce, meatless*
58146110	Pasta with meat sauce*
58146120	Pasta with cheese and meat sauce*
58146130	Pasta with carbonara sauce*
58146150	Pasta with cheese and tomato sauce, meatless*
58146200	Pasta, meat-filled, with gravy, canned*
58146310	Pasta, whole wheat, with tomato sauce, meatless*
58147100	Pasta with pesto sauce*
58147110	Macaroni or noodles with beans or lentils and tomato sauce*
58147350	Macaroni, creamed, with vegetables*
58160220	Rice with vegetables, tomato-based sauce (mixture)*
58161300	White rice with tomato sauce*
58161310	Rice, brown, with tomato sauce*
58163110	Rice with gravy*
58301020	Lasagna with cheese and sauce (diet frozen meal)*

58301030	Veal lasagna (diet frozen meal)*
58301050	Lasagna with cheese and meat sauce (diet frozen meal)*
58301110	Vegetable lasagna (frozen meal)*
58301150	Zucchini lasagna (diet frozen meal)*
58302000	Macaroni and cheese (diet frozen meal)*
58302050	Beef and noodles with meat sauce and cheese (diet frozen meal)*
58302060	Spaghetti or noodles with beef in tomato-based sauce, lowfat, reduced sodium (diet frozen meal)*
58302080	Noodles with vegetables in tomato-based sauce (diet frozen meal)*
58303100	Rice, with broccoli, cheese sauce (frozen side dish)*
58304010	Spaghetti and meatballs dinner, NFS (frozen meal)*
58304050	Spaghetti with meat and mushroom sauce (diet frozen meal)*
58304060	Spaghetti with meat sauce (diet frozen meal)*
58304200	Ravioli, cheese-filled, with tomato sauce (diet frozen meal)*
58304220	Rigatoni with meat sauce and cheese (diet frozen meal)*
58304230	Ravioli, cheese-filled, with vegetable and fruit (frozen meal)*
58304250	Manicotti, cheese-filled, with tomato sauce (diet frozen meal)*
58304400	Linguini with vegetables and seafood in white wine sauce (diet frozen meal)*
58305250	Pasta with vegetable and cheese sauce (diet frozen meal)*
58306010	Beef enchilada dinner, NFS (frozen meal)*
58306020	Beef enchilada, chili gravy, rice, refried beans (frozen meal)*
58306070	Cheese enchilada (frozen meal)*
71507040	White potato, stuffed, baked, peel not eaten, stuffed with broccoli and cheese sauce*
71507050	White potato, stuffed, baked, peel not eaten, stuffed with meat in cream sauce*
71508040	White potato, stuffed, baked, peel eaten, stuffed with broccoli and cheese sauce*
72125230	Spinach, NS as to form, creamed*
72125231	Spinach, from fresh, creamed*
72125232	Spinach, from frozen, creamed*
72125233	Spinach, from canned, creamed*
72125250	Spinach, cooked, NS as to form, with cheese sauce*
72125251	Spinach, cooked, from fresh, with cheese sauce*
72125252	Spinach, cooked, from frozen, with cheese sauce*
72125253	Spinach, cooked, from canned, with cheese sauce*
72201230	Broccoli, cooked, NS as to form, with cheese sauce*
72201231	Broccoli, cooked, from fresh, with cheese sauce*
72201232	Broccoli, cooked, from frozen, with cheese sauce*
72201240	Broccoli, cooked, NS as to form, with mushroom sauce*
72201241	Broccoli, cooked, from fresh, with mushroom sauce*
72201242	Broccoli, cooked, from frozen, with mushroom sauce*
72201250	Broccoli, cooked, NS as to form, with cream sauce*
72201251	Broccoli, cooked, from fresh, with cream sauce*
72201252	Broccoli, cooked, from frozen, with cream sauce*
72202020	Broccoli casserole (broccoli, rice, cheese, and mushroom sauce)*
73102230	Carrots, cooked, NS as to form, creamed*
73102231	Carrots, cooked, from fresh, creamed*
73102233	Carrots, cooked, from canned, creamed*
73102251	Carrots, cooked, from fresh, with cheese sauce*
73102252	Carrots, cooked, from frozen, with cheese sauce*
73111030	Peas and carrots, NS as to form, creamed*
73111032	Peas and carrots, from frozen, creamed*
73111033	Peas and carrots, from canned, creamed*
73111400	Carrots in tomato sauce*
74401010	Tomato catsup
74402010	Tomato chili sauce (catsup-type)
74402100	Salsa, NFS
74402110	Salsa, red, uncooked
74402150	Salsa, red, cooked, not homemade
74402200	Salsa, red, cooked, homemade

74402250	Enchilada sauce, red
74402260	Enchilada sauce, green
74402300	Salsa made with fruit
74402310	Green tomato-chile sauce, raw (Salsa de tomate verde cruda)
74402350	Green tomato-chile sauce, cooked (Salsa verde, NFS)
74403010	Tomato sauce
74403110	Tomato paste
74404010	Spaghetti sauce, meatless
74404020	Spaghetti sauce with vegetables, homemade-style
74404030	Spaghetti sauce with meat, canned, no extra meat added
74404060	Spaghetti sauce, meatless, fat free
74406010	Barbecue sauce
74406100	Steak sauce, tomato-base
74406500	Cocktail sauce
75232050	Seaweed, prepared with soy sauce*
75306010	Eggplant in tomato sauce, cooked, fat not added in cooking*
75316010	Zucchini with tomato sauce, cooked, fat not added in cooking*
75316050	Ratatouille*
75340160	Vegetable and pasta combinations with cream or cheese sauce (broccoli, pasta, carrots, corn, zucchini, peppers, cauliflower, peas, etc.), cooked*
75401010	Asparagus, NS as to form, creamed or with cheese sauce*
75401011	Asparagus, from fresh, creamed or with cheese sauce*
75401012	Asparagus, from frozen, creamed or with cheese sauce*
75401013	Asparagus, from canned, creamed or with cheese sauce*
75402020	Beans, lima, immature, cooked, NS as to form, with mushroom sauce*
75403010	Beans, string, green, NS as to form, creamed or with cheese sauce*
75403011	Beans, string, green, from fresh, creamed or with cheese sauce*
75403012	Beans, string, green, from frozen, creamed or with cheese sauce*
75403013	Beans, string, green, from canned, creamed or with cheese sauce*
75403020	Beans, string, green, cooked, NS as to form, with mushroom sauce*
75403022	Beans, string, green, cooked, from frozen, with mushroom sauce*
75403023	Beans, string, green, cooked, from canned, with mushroom sauce*
75405010	Beets with Harvard sauce*
75407010	Cabbage, creamed*
75409010	Cauliflower, NS as to form, creamed*
75409011	Cauliflower, from fresh, creamed*
75409012	Cauliflower, from frozen, creamed*
75410010	Celery, creamed*
75410550	Jalapeno pepper, stuffed with cheese, breaded or battered, fried*
75411030	Corn, cooked, NS as to form, with cream sauce, made with milk*
75411031	Corn, cooked, from fresh, with cream sauce, made with milk*
75412060	Eggplant parmesan casserole, regular*
75412070	Eggplant with cheese and tomato sauce*
75414010	Mushrooms, NS as to form, creamed*
75414011	Mushrooms, from fresh, creamed*
75414013	Mushrooms, from canned, creamed*
75415010	Onions, NS as to form, creamed*
75415011	Onions, from fresh, creamed*
75417010	Peas, NS as to form, creamed*
75417011	Peas, from fresh, creamed*
75417012	Peas, from frozen, creamed*
75417013	Peas, from canned, creamed*
75418030	Squash, summer, casserole, with rice and tomato sauce*
75418040	Squash, summer, casserole, with cheese sauce*
75418050	Squash, summer, NS as to form, creamed*
75418051	Squash, summer, from fresh, creamed*
75418053	Squash, summer, from canned, creamed*
75440100	Vegetable combination (including carrots, broccoli, and/or dark-green leafy), cooked, with soy-

	based sauce*
75440110	Vegetable combination (excluding carrots, broccoli, and dark-green leafy), cooked, with soy-based sauce*
75440300	Vegetable combinations (including carrots, broccoli, and/or dark-green leafy), cooked, with tomato sauce*
75440310	Vegetable combinations (excluding carrots, broccoli, and dark-green leafy), cooked, with tomato sauce*
75440500	Vegetable combinations (including carrots, broccoli, and/or dark-green leafy), cooked, with cheese sauce*
75440510	Vegetable combinations (excluding carrots, broccoli, and dark-green leafy), cooked, with cheese sauce*
75450500	Vegetable combination (including carrots, broccoli, and/or dark-green leafy), cooked, with cream sauce*
75450510	Vegetable combination (excluding carrots, broccoli, and dark-green leafy), cooked, with cream sauce*
75506100	Mustard sauce
75511010	Tabasco sauce
81301000	Garlic sauce
81301020	Lemon-butter sauce
81302010	Hollandaise sauce
81302030	Orange sauce (for duck)
81302050	Tartar sauce
81302060	Horseradish sauce
81302070	Pesto sauce

#### **Meats**

Food Code	Food Description
14620320	Topping from meat pizza*
14620330	Topping from meat and vegetable pizza*
21002000	Beef, pickled
21416000	Corned beef, cooked, NS as to fat eaten
21416110	Corned beef, cooked, lean and fat eaten
21416120	Corned beef, cooked, lean only eaten
21416150	Corned beef, canned, ready-to-eat
21500100	Ground beef or patty, cooked, NS as to regular, lean, or extra lean
21500110	Ground beef, meatballs, meat only, cooked, NS as to regular, lean, or extra lean
21500200	Ground beef or patty, breaded, cooked
21500300	Ground beef patty, cooked (for fast food sandwiches)
21601000	Beef, bacon, cooked
21601500	Beef, bacon, formed, lean meat added, cooked
21602000	Beef, dried, chipped, uncooked
21602010	Beef, dried, chipped, cooked in fat
21602100	Beef jerky
21603000	Beef, pastrami (beef, smoked, spiced)
22002800	Pork jerky
22107010	Pork chop, smoked or cured, cooked, lean and fat eaten
22107020	Pork chop, smoked or cured, cooked, lean only eaten
22300120	Ham, fried, NS as to fat eaten
22300130	Ham, fried, lean and fat eaten
22300140	Ham, fried, lean only eaten
22300150	Ham, breaded or floured, fried, NS as to fat eaten
22300170	Ham, breaded or floured, fried, lean only eaten
22311000	Ham, smoked or cured, cooked, NS as to fat eaten
22311010	Ham, smoked or cured, cooked, lean and fat eaten
22311020	Ham, smoked or cured, cooked, lean only eaten
22311450	Ham, prosciutto
22311500	Ham, smoked or cured, canned, NS as to fat eaten
22311510	Ham, smoked or cured, canned, lean and fat eaten
22311520	Ham, smoked or cured, canned, lean only eaten



22421010	Pork roast, smoked or cured, cooked, lean and fat eaten
22421020	Pork roast, smoked or cured, cooked, lean only eaten
22431000	Pork roll, cured, fried
22501010	Canadian bacon, cooked
22600100	Bacon, NS as to type of meat, cooked
22600200	Pork bacon, NS as to fresh, smoked or cured, cooked
22601000	Pork bacon, smoked or cured, cooked
22601040	Bacon or side pork, fresh, cooked
22602010	Pork bacon, smoked or cured, lower sodium
22605010	Pork bacon, formed, lean meat added, cooked
22709010	Pork skin, rinds, deep-fried
23322100	Deer bologna
24198570	Chicken, canned, meat only
24201500	Turkey, light or dark meat, smoked, cooked, NS as to skin eaten
24201510	Turkey, light or dark meat, smoked, cooked, skin eaten
24201520	Turkey, light or dark meat, smoked, cooked, skin not eaten
24202120	Turkey, drumstick, smoked, cooked, skin eaten
24208500	Turkey bacon, cooked
25112200	Liver paste or pate, chicken
25210110	Frankfurter, wiener, or hot dog, NFS
25210150	Frankfurter or hot dog, cheese-filled
25210210	Frankfurter or hot dog, beef
25210220	Frankfurter or hot dog, beef and pork
25210230	Frankfurter or hot dog, beef and pork, lowfat
25210250	Frankfurter or hot dog, meat and poultry, fat free
25210280	Frankfurter or hot dog, meat and poultry
25210310	Frankfurter or hot dog, chicken
25210410	Frankfurter or hot dog, turkey
25210610	Frankfurter or hot dog, beef, lowfat
25210700	Frankfurter or hot dog, meat & poultry, lowfat
25220010	Cold cut, NFS
25220100	Beef sausage, NFS
25220110	Beef sausage, brown and serve, links, cooked
25220120	Beef sausage, smoked, stick
25220130	Beef sausage, smoked
25220140	Beef sausage, fresh, bulk, patty or link, cooked
25220150	Beef sausage with cheese, smoked
25220350	Bratwurst, cooked
25220360	Bratwurst, with cheese
25220390	Bologna, beef, lowfat
25220400	Bologna, pork and beef
25220410	Bologna, NFS
25220420	Bologna, Lebanon
25220430	Bologna, beef
25220440	Bologna, turkey
25220460	Bologna, pork
25220470	Bologna, beef, lower sodium
25220480	Bologna, chicken, beef, and pork
25220500	Bologna, beef and pork, lowfat
25220510	Capicola
25220650	Chicken and beef sausage, smoked
25220710	Chorizos
25220910	Head cheese
25221110	Knockwurst
25221210	Mortadella
25221250	Pepperoni
25221310	Polish sausage
25221350	Italian sausage

25221400	Sausage (not cold cut), NFS
25221410	Pork sausage, fresh, bulk, patty or link, cooked
25221420	Pork sausage, brown and serve, cooked
25221430	Pork sausage, country style, fresh, cooked
25221450	Pork sausage rice links, brown and serve, cooked
25221460	Pork and beef sausage
25221470	Pork and beef sausage, brown and serve, cooked
25221500	Salami, NFS
25221510	Salami, soft, cooked
25221520	Salami, dry or hard
25221530	Salami, beef
25221610	Scrapple, cooked
25221650	Smoked link sausage, pork
25221660	Smoked link sausage, pork and beef
25221680	Smoked sausage, pork
25221810	Thuringer
25221840	Turkey breakfast sausage, bulk
25221850	Turkey sausage, smoked
25221860	Turkey sausage, reduced fat, brown and serve, cooked
25221870	Turkey and pork sausage, fresh, bulk, patty or link, cooked
25221880	Turkey, pork, and beef sausage, reduced fat, smoked
25221890	Turkey, pork, and beef sausage, lowfat, smoked
25221910	Vienna sausage, canned
25221920	Vienna sausage, chicken, canned
25221950	Pickled sausage
25230110	Luncheon meat, NFS
25230210	Ham, sliced, prepackaged or deli, luncheon meat
25230220	Ham, sliced, low salt, prepackaged or deli, luncheon meat
25230230	Ham, sliced, extra lean, prepackaged or deli, luncheon meat
25230310	Chicken or turkey loaf, prepackaged or deli, luncheon meat
25230430	Ham and cheese loaf
25230450	Honey loaf
25230510	Ham, luncheon meat, chopped, minced, pressed, spiced, not canned
25230520	Ham, luncheon meat, chopped, minced, pressed, spiced, lowfat, not canned
25230530	Ham and pork, luncheon meat, chopped, minced, pressed, spiced, canned
25230540	Ham, pork and chicken, luncheon meat, chopped, minced, pressed, spiced, canned
25230550	Ham, pork, and chicken, luncheon meat, chopped, minced, pressed, spiced, canned, reduced sodium
25230560	Liverwurst
25230610	Luncheon loaf (olive, pickle, or pimiento)
25230710	Sandwich loaf, luncheon meat
25230790	Turkey ham, sliced, extra lean, prepackaged or deli, luncheon meat
25230800	Turkey ham
25230820	Turkey pastrami
25230840	Turkey salami
25230900	Turkey or chicken breast, prepackaged or deli, luncheon meat
25230905	Turkey or chicken breast, low salt, prepackaged or deli, luncheon meat
25231110	Beef, sliced, prepackaged or deli, luncheon meat
25240000	Meat spread or potted meat, NFS
25240110	Chicken salad spread
25240220	Ham salad spread
25240310	Roast beef spread
27111500	Beef sloppy joe (no bun)*
27112010	Salisbury steak with gravy (mixture)*
27113200	Creamed chipped or dried beef*
27113300	Swedish meatballs with cream or white sauce (mixture)*
27118110	Meatballs, Puerto Rican style (Albondigas guisadas)*
27118120	Stewed seasoned ground beef, Puerto Rican style (Picadillo guisado, picadillo de carne)*

27118180	Puerto Rican style beef stew, meat with gravy (potatoes reported separately)*
27120030	Ham or pork with barbecue sauce (mixture)*
27120080	Ham stroganoff*
27120100	Ham or pork with tomato-based sauce (mixture)*
27120110	Sausage with tomato-based sauce (mixture)*
27120120	Sausage gravy*
27120150	Pork or ham with soy-based sauce (mixture)*
27120210	Frankfurter or hot dog, with chili, no bun*
27120250	Frankfurters or hot dogs with tomato-based sauce (mixture)*
27133010	Stewed goat, Puerto Rican style (Cabrito en fricase, chilindron de chivo)*
27146250	Chicken or turkey cordon bleu*
27160100	Meatballs, NS as to type of meat, with sauce (mixture)*
27214110	Meat loaf made with beef, with tomato-based sauce*
27218210	Puerto Rican style beef stew with potatoes (Carne guisada con papas)*
27218310	Stewed corned beef, Puerto Rican style ("Corned beef" guisado)*
27220010	Meat loaf made with ham (not luncheon meat)*
27220020	Ham and noodles with cream or white sauce (mixture)*
27220030	Ham and rice with (mushroom) soup (mixture)*
27220050	Ham or pork with stuffing (mixture)*
27220080	Ham croquette*
27220120	Sausage and rice with tomato-based sauce (mixture)*
27220150	Sausage and rice with (mushroom) soup (mixture)*
27220170	Sausage and rice with cheese sauce (mixture)*
27220190	Sausage and noodles with cream or white sauce (mixture)*
27220210	Ham and noodles, no sauce (mixture)*
27220310	Ham or pork and rice, no sauce (mixture)*
27220510	Ham or pork and potatoes with gravy (mixture)*
27220520	Ham or pork and potatoes with cheese sauce (mixture)*
27260010	Meat loaf, NS as to type of meat*
27260050	Meatballs, with breading, NS as to type of meat, with gravy*
27260080	Meat loaf made with beef and pork*
27260090	Meat loaf made with beef, veal and pork*
27260100	Meat loaf made with beef and pork, with tomato-based sauce*
27260500	Vienna sausages stewed with potatoes, Puerto Rican style (Salchichas guisadas)*
27311210	Corned beef, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), no sauce (mixture)*
27311220	Corned beef, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), no sauce (mixture)*
27320020	Ham pot pie*
27320030	Ham or pork, noodles and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)*
27320070	Ham or pork, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)*
27320080	Sausage, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce*
27320120	Sausage, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)*
27320130	Sausage, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)*
27320410	Ham, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), no sauce (mixture)*
27348100	Chicken fricassee, Puerto Rican style (Fricase de pollo)*
27350020	Paella with seafood*
27350030	Seafood stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-base sauce*
27350310	Seafood stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-base sauce*
27360090	Paella, NFS*

27360120	Chow mein or chop suey, various types of meat, with noodles*
27363100	Jambalaya with meat and rice*
27411150	Beef rolls, stuffed with vegetables or meat mixture, tomato-based sauce*
27418310	Corned beef with tomato sauce and onion, Puerto Rican style (mixture)*
27420010	Cabbage with ham hocks (mixture)*
27420020	Ham or pork salad*
27420080	Greens with ham or pork (mixture)*
27420250	Ham and vegetables (including carrots, broccoli, and/or dark- green leafy (no potatoes)), no sauce (mixture)*
27420450	Sausage and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27420460	Sausage and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-based sauce (mixture)*
27420470	Sausage and peppers, no sauce (mixture)*
27421010	Stuffed christophine, Puerto Rican style (Chayote relleno)*
27446320	Chicken or turkey (breaded, fried) garden salad with bacon (chicken and/or turkey, bacon, cheese, lettuce and/or greens, tomato and/or carrots, other vegetables), no dressing*
27460490	Julienne salad (meat, cheese, eggs, vegetables), no dressing*
27460510	Antipasto with ham, fish, cheese, vegetables*
27500050	Sandwich, NFS*
27510110	Beef barbecue sandwich or Sloppy Joe, on bun*
27510210	Cheeseburger, plain, on bun*
27510220	Cheeseburger, with mayonnaise or salad dressing, on bun*
27510230	Cheeseburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510240	Cheeseburger, 1/4 lb meat, plain, on bun*
27510250	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing, on bun*
27510260	Cheeseburger, 1/4 lb meat, with mushrooms in sauce, on bun*
27510280	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on bun*
27510290	Double cheeseburger (2 patties), plain, on double-decker bun*
27510300	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on double-decker bun
27510310	Cheeseburger with tomato and/or catsup, on bun
27510311	Cheeseburger, 1 oz meat, plain, on miniature bun*
27510320	Cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun
27510330	Double cheeseburger (2 patties), with tomato and/or catsup, on bun*
27510340	Double cheeseburger (2 patties), with mayonnaise or salad dressing and tomatoes, on bun*
27510350	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun
27510360	Cheeseburger with mayonnaise or salad dressing, tomato and bacon, on bun*
27510370	Double cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510375	Double cheeseburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510380	Triple cheeseburger (3 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510390	Double bacon cheeseburger (2 patties, 1/4 lb meat each), on bun*
27510400	Bacon cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510410	Chiliburger, on bun*
27510420	Taco burger, on bun*
27510425	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510430	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510440	Bacon cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510450	Cheeseburger, 1/4 lb meat, with ham, on bun*
27510500	Hamburger, plain, on bun*
27510510	Hamburger, with tomato and/or catsup, on bun
27510520	Hamburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510530	Hamburger, 1/4 lb meat, plain, on bun*
27510540	Double hamburger (2 patties), with tomato and/or catsup, on bun*
27510550	Double hamburger (2 patties), with mayonnaise or salad dressing and tomatoes, on double-decker bun*

27510560	Hamburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun
27510590	Hamburger, with mayonnaise or salad dressing, on bun*
27510600	Hamburger, 1 oz meat, plain, on miniature bun*
27510620	Hamburger, 1/4 lb meat, with tomato and/or catsup, on bun
27510680	Double hamburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510690	Double hamburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes and/or catsup, on double-decker bun
27510700	Meatball and spaghetti sauce submarine sandwich*
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread*
27511010	Pastrami sandwich*
27520130	Bacon, chicken, and tomato club sandwich, with lettuce and spread*
27520150	Bacon, lettuce, and tomato sandwich with spread*
27520160	Bacon, chicken, and tomato club sandwich, on multigrain roll with lettuce and spread*
27520165	Bacon, chicken fillet (breaded, fried), and tomato club with lettuce and spread*
27520300	Ham sandwich, with spread*
27520310	Ham sandwich with lettuce and spread*
27520320	Ham and cheese sandwich, with lettuce and spread*
27520330	Ham and egg sandwich*
27520350	Ham and cheese sandwich, with spread, grilled*
27520360	Ham and cheese sandwich, on bun, with lettuce and spread*
27520370	Hot ham and cheese sandwich, on bun*
27520390	Ham and cheese submarine sandwich, on multigrain roll, with lettuce, tomato and spread*
27540350	Turkey submarine sandwich, with cheese, lettuce, tomato and spread*
27541000	Turkey, ham, and roast beef club sandwich*
27560110	Bologna sandwich, with spread*
27560300	Corn dog (frankfurter or hot dog with cornbread coating)*
27560320	Frankfurter or hot dog, plain, on bun*
27560330	Frankfurter or hot dog, with cheese, plain, on bun*
27560340	Frankfurter or hot dog, with catsup and/or mustard, on bun*
27560350	Pig in a blanket (frankfurter or hot dog wrapped in dough)*
27560360	Frankfurter or hot dog, with chili, on bun*
27560370	Frankfurter or hot dog with chili and cheese, on bun*
27560510	Salami sandwich, with spread*
27560705	Sausage balls (made with biscuit mix and cheese)*
27560710	Sausage sandwich*
27560910	Submarine, cold cut sandwich, with lettuce and tomato*
28120310	Pork with rice, vegetable, in soy-based sauce (diet frozen meal)*
28320120	Pork vegetable soup with noodles, stew type, chunky style*
28320140	Ham, noodle, and vegetable soup, Puerto Rican style*
28320150	Pork, vegetable soup with potatoes, stew type*
28321130	Bacon soup, cream of, prepared with water*
28340210	Chicken rice soup, Puerto Rican style (Sopa de pollo con arroz)*
28340220	Chicken soup with noodles and potatoes, Puerto Rican style*
28340700	Bird's nest soup (chicken, ham, and noodles)*
28350050	Fish chowder*
32101500	Egg, Benedict*
32105030	Egg omelet or scrambled egg, with ham or bacon*
32105060	Egg omelet or scrambled egg, with peppers, onion, and ham*
32105080	Egg omelet or scrambled egg, with cheese and ham or bacon*
32105085	Egg omelet or scrambled egg, with cheese, ham or bacon, and tomatoes*
32105120	Egg omelet or scrambled egg, with sausage and mushrooms*
32105121	Egg omelet or scrambled egg, with sausage and cheese*
32105122	Egg omelet or scrambled egg, with sausage*
32105125	Egg omelet or scrambled egg, with hot dogs*
32105160	Egg omelet or scrambled egg, with chorizo*
32105190	Egg casserole with bread, cheese, milk and meat*
32105330	Scrambled eggs with jerked beef, Puerto Rican style (Revoltillo de tasajo)*
32202010	Egg, cheese, and ham on English muffin*

32202035	Egg, cheese, and sausage on bun*
32202085	Egg, cheese and bacon on bagel*
35001000	Scrambled eggs, sausage, hash brown potatoes (frozen meal)*
35002000	Scrambled eggs, bacon, home fried potatoes (frozen meal)*
41201010	Baked beans, NFS*
41204020	Boston baked beans*
41205030	Refried beans with meat*
41208100	Beans, dry, cooked with pork*
41210090	Stewed beans with pork, tomatoes, and chili peppers, Mexican style (Frijoles a la charra)*
41210100	Stewed dry red beans, Puerto Rican style (Habichuelas coloradas guisadas)*
41210150	Stewed pink beans with white potatoes and ham, Puerto Rican style*
41210190	Stewed red beans with pig's feet and potatoes, Puerto Rican style*
41304130	Cowpeas, dry, cooked with pork*
41310100	Stewed pigeon peas, Puerto Rican style (Gandules guisados, Gandur, Gandules)*
41601060	Bean soup, with macaroni and meat*
41601110	Bean and ham soup, chunky style*
41601180	Bean and ham soup, home recipe*
41610100	White bean soup, Puerto Rican style (Sopon de habichuelas blancas)*
58100340	Burrito with eggs, sausage, cheese and vegetables*
58100560	Enchilada with ham and cheese, no beans*
58106500	Pizza with meat, prepared from frozen, thin crust*
58106505	Pizza with meat, prepared from frozen, thick crust*
58106510	Pizza with meat, NS as to type of crust*
58106520	Pizza with meat, thin crust*
58106530	Pizza with meat, thick crust*
58106550	Pizza with pepperoni, thin crust*
58106610	Pizza with meat other than pepperoni, NS as to type of crust*
58106620	Pizza with meat other than pepperoni, thin crust*
58106625	Pizza with meat other than pepperoni, regular crust*
58106630	Pizza with meat other than pepperoni, thick crust*
58106640	Pizza with extra meat, NS as to type of crust*
58106650	Pizza with extra meat, thin crust*
58106655	Pizza with extra meat, regular crust*
58106660	Pizza with extra meat, thick crust*
58106710	Pizza with meat and vegetables, NS as to type of crust*
58106720	Pizza with meat and vegetables, thin crust*
58106730	Pizza with meat and vegetables, thick crust*
58106735	Pizza with extra meat and extra vegetables, NS as to type of crust*
58106736	Pizza with extra meat and extra vegetables, thin crust*
58106737	Pizza with extra meat and extra vegetables, thick crust*
58106738	Pizza with extra meat and extra vegetables, regular crust*
58106740	Pizza with meat and fruit, NS as to type of crust*
58106750	Pizza with meat and fruit, thin crust*
58106755	Pizza with meat and fruit, regular crust*
58106760	Pizza with meat and fruit, thick crust*
58106780	Pizza with meat and vegetables, lowfat, thin crust*
58108010	Calzone, with meat and cheese*
58108050	Pizza rolls*
58116110	Meat turnover, Puerto Rican style (Pastelillo de carne; Empanadilla)*
58116210	Meat pie, Puerto Rican style (Pastelon de carne)*
58125110	Quiche with meat, poultry or fish*
58126150	Turnover, meat- and cheese-filled, tomato-based sauce*
58126270	Turnover, chicken- or turkey-, and cheese-filled, no gravy*
58126300	Turnover, meat- and cheese-filled, tomato-based sauce, lower in fat*
58126400	Turnover, filled with egg, meat and cheese*
58127210	Croissant sandwich, filled with ham and cheese*
58127270	Croissant sandwich with sausage and egg*
58127290	Croissant sandwich with bacon and egg*

58127310	Croissant sandwich with ham, egg, and cheese*
58127330	Croissant sandwich with sausage, egg, and cheese*
58127350	Croissant sandwich with bacon, egg, and cheese*
58128000	Biscuit with gravy*
58128250	Dressing with meat and vegetables*
58132710	Spaghetti with tomato sauce and frankfurters or hot dogs*
58134610	Tortellini, meat-filled, with tomato sauce*
58134650	Tortellini, meat-filled, no sauce*
58134710	Tortellini, spinach-filled, with tomato sauce*
58134720	Tortellini, spinach-filled, no sauce*
58145150	Macaroni or noodles with cheese and pork or ham*
58145160	Macaroni or noodles with cheese and frankfurters or hot dogs*
58146130	Pasta with carbonara sauce*
58148550	Pasta or macaroni salad with meat*
58155310	Paella, Valenciana style, with meat (Paella Valenciana)*
58155510	Soupy rice mixture with chicken and potatoes, Puerto Rican style*
58155810	Stewed rice, Puerto Rican style (arroz quisado)*
58156210	Rice with vienna sausage, Puerto Rican style (arroz con salchichas)*
58156310	Rice with Spanish sausage, Puerto Rican style*
58156610	Pigeon pea asopao (Asopao de gandules)*
58156710	Rice with stewed beans, Puerto Rican style*
58160160	Hopping John (black-eyed peas and rice)*
58310210	Sausage and french toast (frozen meal)*
58310310	Pancakes and sausage (frozen meal)*
71106000	Stewed potatoes, Puerto Rican style (Papas guisadas)*
71301120	White potato, cooked, with ham and cheese*
71305110	White potato, scalloped, with ham*
71411000	White potato skins, with adhering flesh, fried, with cheese and bacon*
71508060	White potato, stuffed, baked, peel eaten, stuffed with bacon and cheese*
71508070	White potato, stuffed, baked, peel not eaten, stuffed with bacon and cheese*
71602010	Potato salad, German style*
71803010	Potato chowder*
75144100	Lettuce, wilted, with bacon dressing*
75414020	Mushrooms, stuffed*
75651000	Minestrone soup, home recipe*
75656010	Vegetable soup, Spanish style, stew type*
77121010	Fried stuffed potatoes, Puerto Rican style (Rellenos de papas)*
77205610	Ripe plantain meat pie, Puerto Rican style (Pinon)*
77230210	Cassava Pasteles, Puerto Rican style (Pasteles de yuca)*
77316010	Stuffed cabbage, with meat, Puerto Rican style (Repollo relleno con carne)*
77513010	Spanish stew, Puerto Rican style (Cocido Espanol)*
83101500	Bacon dressing (hot)*

#### **Fillings**

Food Code	Food Description
53204500	Cookie, brownie, with cream cheese filling, without icing*
53206050	Cookie, rich, chocolate chip, with chocolate filling*
53206100	Cookie, chocolate chip sandwich*
53207050	Cookie, chocolate, with chocolate filling or coating, fat free*
53209000	Cookie, chocolate, chocolate sandwich or chocolate-coated or striped*
53209010	Cookie, chocolate-covered, sugar wafer, creme- or caramel-filled*
53209020	Cookie, chocolate sandwich, reduced fat*
53209050	Cookie, chocolate-covered, chocolate sandwich*
53209100	Cookie, chocolate, sandwich, with extra filling*
53209500	Cookie, chocolate and vanilla sandwich*
53210900	Cookie, graham cracker sandwich with chocolate and marshmallow filling*
53220000	Cookie, fruit-filled bar*
53220010	Cookie, fruit-filled bar, fat free*
53233020	Cookie, oatmeal, with fruit filling*

53233050	Cookie, oatmeal sandwich, with creme filling*
53233080	Cookie, oatmeal sandwich, with peanut butter and jelly filling*
53235500	Cookie, with peanut butter filling, chocolate-coated*
53237010	Cookie, raisin sandwich, cream-filled*
53238000	Cookie, sandwich-type, not chocolate or vanilla*
53239050	Cookie, shortbread, with chocolate filling*
53243000	Cookie, vanilla sandwich*
53243050	Cookie, vanilla sandwich, reduced fat*
53243100	Cookie, rich, all chocolate, with chocolate filling or chocolate chips*
53260300	Cookie, dietetic, sandwich type*
53300100	Pie, NFS*
53300170	Pie, individual size or tart, NFS*
53301000	Pie, apple, two crust*
53301070	Pie, apple, individual size or tart*
53301080	Pie, apple, fried pie*
53301500	Pie, apple, one crust*
53301750	Pie, apple, diet*
53302000	Pie, apricot, two crust*
53302070	Pie, apricot, individual size or tart*
53303000	Pie, blackberry, two crust*
53303070	Pie, blackberry, individual size or tart*
53303500	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry; two crust*
53303510	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry; one crust*
53303570	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry, individual size or tart*
53304000	Pie, blueberry, two crust*
53304050	Pie, blueberry, one crust*
53304070	Pie, blueberry, individual size or tart*
53305000	Pie, cherry, two crust*
53305010	Pie, cherry, one crust*
53305070	Pie, cherry, individual size or tart*
53305080	Pie, cherry, fried pie*
53305700	Pie, lemon (not cream or meringue)*
53305720	Pie, lemon (not cream or meringue), individual size or tart*
53306000	Pie, mince, two crust*
53306070	Pie, mince, individual size or tart*
53307000	Pie, peach, two crust*
53307050	Pie, peach, one crust*
53307070	Pie, peach, individual size or tart*
53307080	Pie, peach, fried pie*
53307500	Pie, pear, two crust*
53308000	Pie, pineapple, two crust*
53308070	Pie, pineapple, individual size or tart*
53308500	Pie, prune, one crust*
53309000	Pie, raisin, two crust*
53310000	Pie, raspberry, one crust*
53310050	Pie, raspberry, two crust*
53311000	Pie, rhubarb, two crust*
53311050	Pie, rhubarb, one crust*
53312000	Pie, strawberry, one crust*
53313000	Pie, strawberry-rhubarb, two crust*
53314000	Pie, strawberry, individual size or tart*
53340500	Pie, cherry, made with cream cheese and sour cream*
53341000	Pie, banana cream*
53341500	Pie, buttermilk*
53341750	Pie, chess*



53342000	Pie, chocolate cream*
53342070	Pie, chocolate cream, individual size or tart*
53343000	Pie, coconut cream*
53343070	Pie, coconut cream, individual size or tart*
53344000	Pie, custard*
53344200	Mixed fruit tart filled with custard or cream cheese*
53345000	Pie, lemon cream*
53345070	Pie, lemon cream, individual size or tart*
53346000	Pie, peanut butter cream*
53346500	Pie, pineapple cream*
53347000	Pie, pumpkin*
53347070	Pie, pumpkin, individual size or tart*
53347100	Pie, raspberry cream*
53347600	Pie, squash*
53348000	Pie, strawberry cream*
53360000	Pie, sweetpotato*
53365000	Pie, vanilla cream*
53370000	Pie, chiffon, not chocolate*
53381000	Pie, lemon meringue*
53382000	Pie, chocolate-marshmallow*
53385000	Pie, pecan*
53385070	Pie, pecan, individual size or tart*
53385500	Pie, oatmeal*
53386000	Pie, pudding, flavors other than chocolate*
53386050	Pie, pudding, flavors other than chocolate, individual size or tart*
53386250	Pie, pudding, chocolate, with chocolate coating, individual size*
53387000	Pie, Toll house chocolate chip*
53390000	Pie, shoo-fly*
53400200	Blintz, cheese-filled*
53400300	Blintz, fruit-filled*
53410100	Cobbler, apple*
53410300	Cobbler, berry*
53410500	Cobbler, cherry*
53410800	Cobbler, peach*
53410850	Cobbler, pear*
53410860	Cobbler, pineapple*
53410900	Cobbler, rhubarb*
53415100	Crisp, apple, apple dessert*
53415300	Crisp, blueberry*
53415400	Crisp, cherry*
53415500	Crisp, peach*
53415600	Crisp, rhubarb*
53420000	Cream puff, eclair, custard or cream filled, NS as to icing*
53420100	Cream puff, eclair, custard or cream filled, not iced*
53420200	Cream puff, eclair, custard or cream filled, iced*
53420210	Cream puff, eclair, custard or cream filled, iced, reduced fat*
53430100	Crepe, dessert type, chocolate-filled*
53430200	Crepe, dessert type, fruit-filled*
53430250	Crepe suzette*
53430750	Tamale, sweet, with fruit*
53440000	Strudel, apple*
53440300	Strudel, berry*
53440500	Strudel, cherry*
53440600	Strudel, cheese*
53440800	Strudel, cheese and fruit*
53450000	Turnover or dumpling, apple*
53450300	Turnover or dumpling, berry*
53450500	Turnover or dumpling, cherry*

53450800	Turnover or dumpling, lemon*
53451000	Turnover or dumpling, peach*
53451750	Turnover, pumpkin*
53452100	Pastry, fruit-filled*
53452420	Pastry, puff, custard or cream filled, iced or not iced*
53452450	Cheese pastry puffs*
53453150	Empanada, Mexican turnover, fruit-filled*
53453170	Empanada, Mexican turnover, pumpkin*
53500100	Breakfast pastry, NFS*
53510100	Danish pastry, with fruit*
53511000	Danish pastry, with cheese*
53511500	Danish pastry, with cheese, fat free, cholesterol free*
53521140	Doughnut, jelly*
53521210	Doughnut, custard-filled*
53521220	Doughnut, chocolate cream-filled*
53521230	Doughnut, custard-filled, with icing*
53540200	Breakfast bar, cereal crust with fruit filling, lowfat*
53540250	Breakfast bar, cereal crust with fruit filling, fat free*
53540404	Kellogg's Nutri-Grain Fruit and Nut Bar*
53610170	Coffee cake, crumb or quick-bread type, with fruit*
53610200	Coffee cake, crumb or quick-bread type, cheese-filled*
54102200	Crackers, graham, sandwich-type, with filling*
54327950	Crackers, cylindrical, peanut-butter filled*
54328000	Crackers, sandwich-type, NFS*
54328100	Cracker, sandwich-type, peanut butter filled*
54328110	Cracker, sandwich-type, peanut butter filled, reduced fat*
54328200	Cracker, sandwich-type, cheese-filled*
61113500	Lemon pie filling
63113030	Cherry pie filling
63203700	Blueberry pie filling

#### **Dips**

Food Code	Food Description
12350000	Dip, sour cream base
12350020	Dip, sour cream base, reduced calorie
12350100	Spinach dip, sour cream base
14620100	Dip, cream cheese base
14620120	Shrimp dip, cream cheese base
14620150	Dip, cheese with chili pepper (chili con queso)
14620200	Dip, cheese base other than cream cheese
41205050	Bean dip, made with refried beans
63408010	Guacamole with tomatoes
63408200	Guacamole with tomatoes and chili peppers
63409010	Guacamole, NFS
74402100	Salsa, NFS
74402110	Salsa, red, uncooked
74402150	Salsa, red, cooked, not homemade
74402300	Salsa made with fruit
75412030	Eggplant dip

#### **Bakery**

Food Code	Food Description
14640100	Cheese sandwich, grilled*
27500050	Sandwich, NFS*
27500200	Wrap sandwich, filled with meat, poultry, or fish, vegetables, and cheese*
27500300	Wrap sandwich, filled with meat, poultry, or fish, and vegetables*
27510110	Beef barbecue sandwich or Sloppy Joe, on bun*
27510210	Cheeseburger, plain, on bun*
27510220	Cheeseburger, with mayonnaise or salad dressing, on bun*

27510230	Cheeseburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510240	Cheeseburger, 1/4 lb meat, plain, on bun*
27510250	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing, on bun*
27510260	Cheeseburger, 1/4 lb meat, with mushrooms in sauce, on bun*
27510280	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on bun*
27510290	Double cheeseburger (2 patties), plain, on double-decker bun*
27510300	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on double-decker bun*
27510310	Cheeseburger with tomato and/or catsup, on bun*
27510311	Cheeseburger, 1 oz meat, plain, on miniature bun*
27510320	Cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510330	Double cheeseburger (2 patties), with tomato and/or catsup, on bun*
27510340	Double cheeseburger (2 patties), with mayonnaise or salad dressing and tomatoes, on bun*
27510350	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510360	Cheeseburger with mayonnaise or salad dressing, tomato and bacon, on bun*
27510370	Double cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510375	Double cheeseburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510380	Triple cheeseburger (3 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510390	Double bacon cheeseburger (2 patties, 1/4 lb meat each), on bun*
27510400	Bacon cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510410	Chiliburger, on bun*
27510420	Taco burger, on bun*
27510425	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510430	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510440	Bacon cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510450	Cheeseburger, 1/4 lb meat, with ham, on bun*
27510500	Hamburger, plain, on bun*
27510510	Hamburger, with tomato and/or catsup, on bun
27510520	Hamburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510530	Hamburger, 1/4 lb meat, plain, on bun*
27510540	Double hamburger (2 patties), with tomato and/or catsup, on bun*
27510550	Double hamburger (2 patties), with mayonnaise or salad dressing and tomatoes, on double-decker bun*
27510560	Hamburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510590	Hamburger, with mayonnaise or salad dressing, on bun*
27510600	Hamburger, 1 oz meat, plain, on miniature bun*
27510620	Hamburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510680	Double hamburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510690	Double hamburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes and/or catsup, on double-decker bun*
27510700	Meatball and spaghetti sauce submarine sandwich*
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread*
27511010	Pastrami sandwich*
27513010	Roast beef sandwich*
27513040	Roast beef submarine sandwich, with lettuce, tomato and spread*
27513050	Roast beef sandwich with cheese*
27513070	Roast beef submarine sandwich, on roll, au jus*
27515010	Steak sandwich, plain, on roll*
27515020	Steak and cheese submarine sandwich, with lettuce and tomato*
27515040	Steak and cheese submarine sandwich, plain, on roll*
27515070	Steak and cheese submarine sandwich, with fried peppers and onions, on roll*
27515080	Steak sandwich, plain, on biscuit*
27516010	Gyro sandwich (pita bread, beef, lamb, onion, condiments), with tomato and spread*
27520130	Bacon, chicken, and tomato club sandwich, with lettuce and spread*
27520135	Bacon, chicken, and tomato club sandwich, with cheese, lettuce and spread*
27520150	Bacon, lettuce, and tomato sandwich with spread*

27520160	Bacon, chicken, and tomato club sandwich, on multigrain roll with lettuce and spread*
27520165	Bacon, chicken fillet (breaded, fried), and tomato club with lettuce and spread*
27520166	Bacon, chicken fillet (breaded, fried), and tomato club sandwich with cheese, lettuce and spread*
27520300	Ham sandwich, with spread*
27520310	Ham sandwich with lettuce and spread*
27520320	Ham and cheese sandwich, with lettuce and spread*
27520330	Ham and egg sandwich*
27520350	Ham and cheese sandwich, with spread, grilled*
27520360	Ham and cheese sandwich, on bun, with lettuce and spread*
27520370	Hot ham and cheese sandwich, on bun*
27520390	Ham and cheese submarine sandwich, on multigrain roll, with lettuce, tomato and spread*
27520500	Pork sandwich, on white roll, with onions, dill pickles and barbecue sauce*
27520510	Pork barbecue sandwich or Sloppy Joe, on bun*
27540110	Chicken sandwich, with spread*
27540120	Chicken salad or chicken spread sandwich*
27540130	Chicken barbecue sandwich*
27540140	Chicken fillet (breaded, fried) sandwich*
27540145	Chicken fillet (breaded, fried) sandwich on biscuit*
27540150	Chicken fillet (breaded, fried) sandwich with lettuce, tomato and spread*
27540170	Chicken patty sandwich, miniature, with spread*
27540180	Chicken patty sandwich or biscuit*
27540190	Chicken patty sandwich, with lettuce and spread*
27540200	Fajita-style chicken sandwich with cheese, on pita bread, with lettuce and tomato*
27540210	Wrap sandwich filled with chicken strips (breaded, fried), cheese, lettuce, and spread*
27540230	Chicken patty sandwich with cheese, on wheat bun, with lettuce, tomato and spread*
27540235	Chicken fillet, broiled, sandwich with lettuce, tomato, and spread*
27540240	Chicken fillet, (broiled), sandwich, on whole wheat roll, with lettuce, tomato and spread*
27540250	Chicken fillet, broiled, sandwich with cheese, on whole wheat roll, with lettuce, tomato and non-mayonaise type spread*
27540260	Chicken fillet, broiled, sandwich, on oat bran bun, with lettuce, tomato, spread*
27540270	Chicken fillet, broiled, sandwich, with lettuce, tomato, and non-mayonnaise type spread*
27540280	Chicken fillet, broiled, sandwich with cheese, on bun, with lettuce, tomato and spread*
27540290	Chicken submarine sandwich, with lettuce, tomato, and spread*
27540300	Wrap sandwich filled with chicken strips (broiled), cheese, lettuce, and spread*
27540310	Turkey sandwich, with spread*
27540350	Turkey submarine sandwich, with cheese, lettuce, tomato and spread*
27541000	Turkey, ham, and roast beef club sandwich*
27550000	Fish sandwich, on bun, with spread*
27550100	Fish sandwich, on bun, with cheese and spread*
27550720	Tuna salad sandwich*
27550750	Tuna salad submarine sandwich, with lettuce and tomato*
27560110	Bologna sandwich, with spread*
27560320	Frankfurter or hot dog, plain, on bun*
27560330	Frankfurter or hot dog, with cheese, plain, on bun*
27560340	Frankfurter or hot dog, with catsup and/or mustard, on bun*
27560350	Pig in a blanket (frankfurter or hot dog wrapped in dough)*
27560360	Frankfurter or hot dog, with chili, on bun*
27560370	Frankfurter or hot dog with chili and cheese, on bun*
27560510	Salami sandwich, with spread*
27560670	Sausage and cheese on English muffin*
27560710	Sausage sandwich*
27560910	Submarine, cold cut sandwich, with lettuce and tomato*
32101500	Egg, Benedict*
32105190	Egg casserole with bread, cheese, milk and meat*
32202010	Egg, cheese, and ham on English muffin*
32202025	Egg, cheese and ham on bagel*
32202030	Egg, cheese, and sausage on English muffin*

32202035	Egg, cheese, and sausage on bun*
32202040	Egg, cheese, and beef on English Muffin*
32202045	Egg, cheese, and steak on bagel*
32202080	Egg, cheese, and bacon on English muffin*
32202085	Egg, cheese and bacon on bagel*
32202120	Egg, cheese and sausage on bagel*
42301010	Peanut butter sandwich*
42302010	Peanut butter and jelly sandwich*
51000100	Bread, NS as to major flour
51000110	Bread, NS as to major flour, toasted
51000180	Bread, made from home recipe or purchased at a bakery, NS as to major flour
51000190	Bread, made from home recipe or purchased at a bakery, toasted, NS as to major flour
51000200	Roll, NS as to major flour
51000250	Roll, made from home recipe or purchased at a bakery, NS as to major flour
51000300	Roll, hard, NS as to major flour
51000400	Roll, bran, NS as to type of bran
51101000	Bread, white
51101010	Bread, white, toasted
51101050	Bread, white, made from home recipe or purchased at a bakery
51101060	Bread, white, made from home recipe or purchased at a bakery, toasted
51102010	Bread, white with whole wheat swirl
51102020	Bread, white with whole wheat swirl, toasted
51105010	Bread, Cuban
51105040	Bread, Cuban, toasted
51107010	Bread, French or Vienna
51107040	Bread, French or Vienna, toasted
51108010	Focaccia, Italian flatbread, plain
51108100	Naan, Indian flatbread
51109010	Bread, Italian, Grecian, Armenian
51109040	Bread, Italian, Grecian, Armenian, toasted
51109100	Bread, pita
51109110	Bread, pita, toasted
51109150	Bread, pita with fruit
51110010	Bread, batter
51111010	Bread, cheese
51111040	Bread, cheese, toasted
51113010	Bread, cinnamon
51113100	Bread, cinnamon, toasted
51115010	Bread, cornmeal and molasses
51115020	Bread, cornmeal and molasses, toasted
51119010	Bread, egg, Challah
51119040	Bread, egg, Challah, toasted
51121010	Bread, garlic
51121040	Bread, garlic, toasted
51121110	Bread, onion
51122000	Bread, reduced calorie and/or high fiber, white or NFS
51122010	Bread, reduced calorie and/or high fiber, white or NFS, toasted
51122050	Bread, reduced calorie and/or high fiber, Italian
51122100	Bread, reduced calorie and/or high fiber, white or NFS, with fruit and/or nuts
51122300	Bread, white, special formula, added fiber
51123010	Bread, high protein
51126010	Bread, milk and honey
51126020	Bread, milk and honey, toasted
51127010	Bread, potato
51127020	Bread, potato, toasted
51129010	Bread, raisin
51129020	Bread, raisin, toasted
51133010	Bread, sour dough

51133020	Bread, sour dough, toasted
51134000	Bread, sweetpotato
51135000	Bread, vegetable
51140100	Bread, dough, fried
51150000	Roll, white, soft
51150100	Roll, white, soft, toasted
51151060	Roll, white, soft, made from home recipe or purchased at a bakery
51152000	Roll, white, soft, reduced calorie and/or high fiber
51153000	Roll, white, hard
51153010	Roll, white, hard, toasted
51154550	Roll, egg bread
51154600	Roll, cheese
51155000	Roll, French or Vienna
51155010	Roll, French or Vienna, toasted
51156500	Roll, garlic
51157000	Roll, hoagie, submarine
51158100	Roll, Mexican, bolillo
51159000	Roll, sour dough
51160000	Roll, sweet
51160010	Roll, sweet, toasted
51160100	Roll, sweet, cinnamon bun, no frosting
51160110	Roll, sweet, cinnamon bun, frosted
51161000	Roll, sweet, with fruit, no frosting
51161020	Roll, sweet, with fruit, frosted
51161030	Roll, sweet, with fruit, frosted, diet
51161050	Roll, sweet, with nuts, frosted
51161070	Roll, sweet, with fruit, frosted, fat free
51161100	Roll, sweet, with fruit and nuts, no frosting
51161150	Roll, sweet, with fruit and nuts, frosted
51161200	Roll, sweet, with nuts, no frosting
51161250	Roll, sweet, no topping, Mexican (Pan Dulce)
51161260	Roll, sweet, crumb topping, Mexican (Pan Dulce)
51161270	Roll, sweet, sugar topping, Mexican (Pan Dulce)
51161280	Roll, sweet, with raisins and icing, Mexican (Pan Dulce)
51165000	Coffee cake, yeast type
51165060	Coffee cake, yeast type, made from home recipe or purchased at a bakery
51165100	Coffee cake, yeast type, fat free, cholesterol free, with fruit
51166000	Croissant
51166100	Croissant, cheese
51166200	Croissant, chocolate
51166500	Croissant, fruit
51167000	Brioche
51168000	Bread, Spanish coffee
51180010	Bagel
51180020	Bagel, toasted
51180030	Bagel, with raisins
51180080	Bagel, with fruit other than raisins
51182010	Bread stuffing
51182020	Bread stuffing made with egg
51184000	Bread sticks, hard
51184010	Bread stick, soft
51184020	Bread stick, NS as to hard or soft
51184030	Bread stick, soft, prepared with garlic and parmesan cheese
51184100	Bread stick, hard, low sodium
51185000	Croutons
51186010	Muffin, English
51186020	Muffin, English, toasted
51186100	Muffin, English, with raisins

51187000	Melba toast
51187020	Anisette toast
51188100	Pannetone (Italian-style sweetbread)
51188500	Zwieback toast
51201010	Bread, whole wheat, 100%
51201020	Bread, whole wheat, 100%, toasted
51201060	Bread, whole wheat, 100%, made from home recipe or purchased at bakery
51201070	Bread, whole wheat, 100%, made from home recipe or purchased at bakery, toasted
51201120	Bread, whole wheat, 100%, with raisins, toasted
51201150	Bread, pita, whole wheat, 100%
51207010	Bread, sprouted wheat
51207020	Bread, sprouted wheat, toasted
51208000	Bagel, whole wheat, 100%
51208100	Bagel, whole wheat, 100%, with raisins
51220000	Roll, whole wheat, 100%
51300050	Bread, whole grain white
51300060	Bread, whole grain white, toasted
51300110	Bread, whole wheat, NS as to 100%
51300120	Bread, whole wheat, NS as to 100%, toasted
51300140	Bread, whole wheat, NS as to 100%, made from home recipe or purchased at bakery
51300150	Bread, whole wheat, NS as to 100%, made from home recipe or purchased at bakery, toasted
51300180	Bread, puri or poori (Indian puffed bread), whole wheat, NS as to 100%, fried
51300210	Bread, whole wheat, NS as to 100%, with raisins
51300220	Bread, whole wheat, NS as to 100%, with raisins, toasted
51301010	Bread, wheat or cracked wheat
51301020	Bread, wheat or cracked wheat, toasted
51301040	Bread, wheat or cracked wheat, made from home recipe or purchased at bakery
51301050	Bread, wheat or cracked wheat, made from home recipe or purchased at bakery, toasted
51301120	Bread, wheat or cracked wheat, with raisins
51301130	Bread, wheat or cracked wheat, with raisins, toasted
51301510	Bread, wheat or cracked wheat, reduced calorie and/or high fiber
51301520	Bread, wheat or cracked wheat, reduced calorie and/or high fiber, toasted
51301540	Bread, French or Vienna, whole wheat, NS as to 100%, made from home recipe or purchased at bakery
51301600	Bread, pita, whole wheat, NS as to 100%
51301620	Bread, pita, wheat or cracked wheat
51301700	Bagel, wheat
51301750	Bagel, whole wheat, NS as to 100%
51301800	Bagel, wheat, with raisins
51301820	Bagel, wheat, with fruit and nuts
51301900	Bagel, wheat bran
51302020	Bread, wheat bran, toasted
51302050	Bread, wheat bran, with raisins
51302060	Bread, wheat bran, with raisins, toasted
51302500	Muffin, English, wheat bran
51302520	Muffin, English, wheat bran, with raisins
51303010	Muffin, English, wheat or cracked wheat
51303030	Muffin, English, whole wheat, NS as to 100%
51303050	Muffin, English, wheat or cracked wheat, with raisins
51303070	Muffin, English, whole wheat, NS as to 100%, with raisins
51320010	Roll, wheat or cracked wheat
51320020	Roll, wheat or cracked wheat, toasted
51320500	Roll, whole wheat, NS as to 100%
51320530	Roll, whole wheat, NS as to 100%, made from home recipe or purchased at bakery
51401010	Bread, rye
51401020	Bread, rye, toasted
51401030	Bread, marble rye and pumpernickel
51401040	Bread, marble rye and pumpernickel, toasted

51401060	Bread, rye, reduced calorie and/or high fiber
51404010	Bread, pumpernickel
51404020	Bread, pumpernickel, toasted
51404500	Bagel, pumpernickel
51404550	Muffin, English, pumpernickel
51407010	Bread, black
51420000	Roll, rye
51421000	Roll, pumpernickel
51501010	Bread, oatmeal
51501020	Bread, oatmeal, toasted
51501040	Bread, oat bran
51501050	Bread, oat bran, toasted
51501080	Bagel, oat bran
51502010	Roll, oatmeal
51502100	Roll, oat bran
51503000	Muffin, English, oat bran
51601010	Bread, multigrain, toasted
51601020	Bread, multigrain
51601210	Bread, multigrain, with raisins
51601220	Bread, multigrain, with raisins, toasted
51602010	Bread, multigrain, reduced calorie and/or high fiber
51620000	Roll, multigrain
51630000	Bagel, multigrain
51630100	Bagel, multigrain, with raisins
51630200	Muffin, English, multigrain
51801010	Bread, barley
51804010	Bread, soy
51804020	Bread, soy, toasted
51805010	Bread, sunflower meal
51805020	Bread, sunflower meal, toasted
51806010	Bread, rice
51807000	Injera (American-style Ethiopian bread)
52101000	Biscuit, baking powder or buttermilk type, NS as to made from mix, refrigerated dough, or home recipe
52101030	Biscuit dough, fried
52101040	Crumpet
52101100	Biscuit, baking powder or buttermilk type, made from mix
52102040	Biscuit, baking powder or buttermilk type, made from refrigerated dough
52103000	Biscuit, baking powder or buttermilk type, commercially baked
52104010	Biscuit, baking powder or buttermilk type, made from home recipe
52104040	Biscuit, whole wheat
52104100	Biscuit, cheese
52104200	Biscuit, cinnamon-raisin
52105100	Scone
52105200	Scone, with fruit
52201000	Cornbread, prepared from mix
52202060	Cornbread, made from home recipe
52204000	Cornbread stuffing
52206010	Cornbread muffin, stick, round
52206060	Cornbread muffin, stick, round, made from home recipe
52207010	Corn flour patty or tart, fried
52208010	Corn pone, baked
52208750	Gordita/sope shell, plain, no filling, grilled, no fat added
52208760	Gordita/sope shell, plain, no filling, fried in oil
52209010	Hush puppy
52215000	Tortilla, NFS
52215100	Tortilla, corn
52215200	Tortilla, flour (wheat)



52215260	Tortilla, whole wheat
52215300	Taco shell, corn
52215350	Taco shell, flour
52220110	Cornmeal bread, Dominican style (Arepa Dominicana)
52301000	Muffin, NFS
52302010	Muffin, fruit and/or nuts
52302020	Muffin, fruit and/or nut, low fat
52302100	Muffin, fruit, fat free, cholesterol free
52302500	Muffin, chocolate chip
52302600	Muffin, chocolate
52302610	Muffin, chocolate, lowfat
52303010	Muffin, whole wheat
52303500	Muffin, wheat
52304010	Muffin, wheat bran
52304040	Muffin, bran with fruit, lowfat
52304060	Muffin, bran with fruit, no fat, no cholesterol
52304100	Muffin, oatmeal
52304150	Muffin, oat bran
52304200	Muffin, oat bran with fruit and/or nuts
52306010	Muffin, plain
52306300	Muffin, cheese
52306500	Muffin, pumpkin
52306550	Muffin, zucchini
52306700	Muffin, carrot
52308010	Matzo, fritters
52311010	Popover
52320110	Toaster muffin, fruit, toasted
52403000	Bread, nut
52404060	Bread, pumpkin
52405010	Bread, fruit, without nuts
52405100	Bread, fruit and nut
52406010	Bread, whole wheat, with nuts
52407000	Bread, zucchini
52408000	Bread, Irish soda
53100070	Cake batter, raw, not chocolate
53100100	Cake, NS as to type, with or without icing
53101100	Cake, angel food, without icing
53101200	Cake, angel food, with icing
53101250	Cake, angel food, with fruit and icing or filling
53101300	Cake, angel food, chocolate, without icing
53102000	Cake, applesauce, NS as to icing
53102100	Cake, applesauce, without icing
53102200	Cake, applesauce, with icing
53102300	Cake, applesauce, diet, without icing
53102600	Cake, banana, without icing
53102700	Cake, banana, with icing
53102800	Cake, black forest (chocolate-cherry)
53103000	Cake, Boston cream pie
53103550	Cake, butter, without icing
53103600	Cake, butter, with icing
53104000	Cake, carrot, NS as to icing
53104100	Cake, carrot, without icing
53104260	Cake, carrot, with icing
53104300	Cake, carrot, diet
53104400	Cake, coconut, with icing
53104500	Cheesecake
53104520	Cheesecake, diet
53104550	Cheesecake with fruit

53104570	Cheesecake, diet, with fruit
53104600	Cheesecake, chocolate
53105050	Cake, chocolate, devil's food, or fudge, made from home recipe or purchased ready-to-eat, NS as to icing
53105100	Cake, chocolate, devil's food, or fudge, standard-type mix (eggs and water added to dry mix), without icing or filling
53105160	Cake, chocolate, devil's food, or fudge, without icing or filling, made from home recipe or purchased ready-to-eat
53105200	Cake, chocolate, devil's food, or fudge, standard-type mix (eggs and water added to dry mix), with icing, coating, or filling
53105260	Cake, chocolate, devil's food, or fudge, with icing, coating, or filling, made from home recipe or purchased ready-to-eat
53105300	Cake, German chocolate, with icing and filling
53105500	Cake, chocolate, with icing, diet
53105600	Cake, chocolate, devil's food, or fudge, pudding-type mix, made by "Lite" recipe (eggs and water added to dry mix, no oil added to dry mix), with icing, coating, or filling
53105750	Cake, chocolate, devil's food, or fudge, pudding type mix, made by "cholesterol free" recipe (water, oil and egg whites added to dry mix), with "light" icing, coating or filling
53106000	Cake, chocolate, devil's food, or fudge, pudding-type mix (oil, eggs, and water added to dry mix), without icing or filling
53106500	Cake, cream, without icing or topping
53107000	Cake, cupcake, NS as to type or icing
53107200	Cake, cupcake, NS as to type, with icing
53108000	Cake, cupcake, chocolate, NS as to icing
53108100	Cake, cupcake, chocolate, without icing or filling
53108200	Cake, cupcake, chocolate, with icing or filling
53109100	Cake, cupcake, not chocolate, without icing or filling
53109200	Cake, cupcake, not chocolate, with icing or filling
53109210	Cake, cupcake, not chocolate, with icing or filling, lowfat, cholesterol free
53109250	Cake, cupcake, not chocolate, with fruit and cream filling
53109270	Cake, cupcake, chocolate, with or without icing, fruit filling or cream filling, lowfat, cholesterol free
53109300	Cake, Dobos Torte (non-chocolate layer cake with chocolate filling and icing)
53110000	Cake, fruit cake, light or dark, holiday type cake
53111000	Cake, gingerbread, without icing
53111500	Cake, graham cracker, without icing
53112000	Cake, ice cream and cake roll, chocolate
53112100	Cake, ice cream and cake roll, not chocolate
53113000	Cake, jelly roll
53114000	Cake, lemon, without icing
53114100	Cake, lemon, with icing
53114200	Cake, lemon, lowfat, without icing
53114250	Cake, lemon, lowfat, with icing
53115100	Cake, marble, without icing
53115200	Cake, marble, with icing
53115310	Cake, nut, without icing
53115320	Cake, nut, with icing
53115400	Cake, oatmeal, without icing
53115410	Cake, oatmeal, with icing
53115450	Cake, peanut butter, with icing
53115600	Cake, poppyseed, without icing
53116000	Cake, pound, without icing
53116020	Cake, pound, with icing
53116270	Cake, pound, chocolate
53116350	Cake, pound, Puerto Rican style (Ponque)
53116390	Cake, pound, reduced fat, cholesterol free
53116500	Cake, pumpkin, without icing
53116510	Cake, pumpkin, with icing

53116550	Cake, raisin-nut, without icing
53116560	Cake, raisin-nut, with icing
53117100	Cake, spice, without icing
53117200	Cake, spice, with icing
53118100	Cake, sponge, without icing
53118200	Cake, sponge, with icing
53118300	Cake, sponge, chocolate, without icing
53118350	Cake, sweetpotato, with icing
53118410	Cake, rum flavored, without icing (Sopa Borracha)
53118500	Cake, torte
53118550	Cake, tres leche
53119000	Cake, upside down (all fruits)
53120000	Cake, white, standard-type mix (egg whites and water added), NS as to icing
53120060	Cake, white, made from home recipe or purchased ready-to-eat, NS as to icing
53120100	Cake, white, standard-type mix (egg whites and water added to mix), without icing
53120160	Cake, white, without icing, made from home recipe or purchased ready-to-eat
53120200	Cake, white, standard-type mix (egg whites and water added to mix), with icing
53120260	Cake, white, with icing, made from home recipe or purchased ready-to-eat
53120330	Cake, white, pudding-type mix (oil, egg whites, and water added to dry mix), without icing
53120350	Cake, white, pudding-type mix (oil, egg whites, and water added to dry mix), with icing
53120400	Cake, white, eggless, lowfat
53120500	Cake, whole wheat, with fruit and nuts, without icing
53121060	Cake, yellow, made from home recipe or purchased ready-to-eat, NS as to icing
53121100	Cake, yellow, standard-type mix (eggs and water added to dry mix), without icing
53121160	Cake, yellow, without icing, made from home recipe or purchased ready-to-eat
53121200	Cake, yellow, standard-type mix (eggs and water added to dry mix), with icing
53121260	Cake, yellow, with icing, made from home recipe or purchased ready-to-eat
53121300	Cake, yellow, pudding-type mix (oil, eggs, and water added to dry mix), without icing
53121330	Cake, yellow, pudding-type mix (oil, eggs, and water added to dry mix), with icing
53122070	Cake, shortcake, biscuit type, with whipped cream and fruit
53122080	Cake, shortcake, biscuit type, with fruit
53123070	Cake, shortcake, sponge type, with whipped cream and fruit
53123080	Cake, shortcake, sponge type, with fruit
53123500	Cake, shortcake, with whipped topping and fruit, diet
53124110	Cake, zucchini, without icing
53124120	Cake, zucchini, with icing
53200100	Cookie, batter or dough, raw, not chocolate
53201000	Cookie, NFS
53202000	Cookie, almond
53203000	Cookie, applesauce
53203500	Cookie, biscotti (Italian sugar cookie)
53204000	Cookie, brownie, NS as to icing
53204010	Cookie, brownie, without icing
53204100	Cookie, brownie, with icing
53204500	Cookie, brownie, with cream cheese filling, without icing
53204600	Cookie, brownie, with peanut butter fudge icing
53204800	Cookie, brownie, diet, NS as to icing
53204830	Cookie, brownie, lowfat, with icing
53204840	Cookie, brownie, lowfat, without icing
53204850	Cookie, brownie, fat free, cholesterol free, with icing
53204860	Cookie, brownie, fat free, without icing
53205250	Cookie, butterscotch, brownie
53205500	Cookie, butterscotch chip
53205600	Cookie, caramel coated, with nuts
53206000	Cookie, chocolate chip
53206010	Cookie, chocolate chip, with raisins
53206020	Cookie, chocolate chip, made from home recipe or purchased at a bakery
53206030	Cookie, chocolate chip, reduced fat

53206050	Cookie, rich, chocolate chip, with chocolate filling
53206100	Cookie, chocolate chip sandwich
53206500	Cookie, chocolate, made with rice cereal
53206550	Cookie, chocolate, made with oatmeal and coconut (no-bake)
53207000	Cookie, chocolate fudge, with/without nuts
53207050	Cookie, chocolate, with chocolate filling or coating, fat free
53208000	Cookie, chocolate-covered marshmallow
53208200	Cookie, marshmallow pie, chocolate covered
53209000	Cookie, chocolate, chocolate sandwich or chocolate-coated or striped
53209010	Cookie, chocolate-covered, sugar wafer, creme- or caramel-filled
53209020	Cookie, chocolate sandwich, reduced fat
53209050	Cookie, chocolate-covered, chocolate sandwich
53209100	Cookie, chocolate, sandwich, with extra filling
53209500	Cookie, chocolate and vanilla sandwich
53210000	Cookie, chocolate wafer
53210900	Cookie, graham cracker sandwich with chocolate and marshmallow filling
53210910	Cookie, graham cracker with marshmallow
53211000	Cookie bar, with chocolate, nuts, and graham crackers
53215500	Cookie, coconut
53216000	Cookie, coconut and nut
53220000	Cookie, fruit-filled bar
53220010	Cookie, fruit-filled bar, fat free
53220020	Cookie, date bar
53220030	Cookie, fig bar
53220040	Cookie, fig bar, fat free
53222010	Cookie, fortune
53222020	Cookie, cone shell, ice cream type, wafer or cake
53222100	Cookie, cone shell, ice cream type, brown sugar
53223000	Cookie, gingersnaps
53223100	Cookie, granola
53224000	Cookie, ladyfinger
53224250	Cookie, lemon bar
53225000	Cookie, macaroon, coconut-meringue type, no flour
53226000	Cookie, marshmallow, with coconut
53226500	Cookie, marshmallow, with rice cereal (no-bake)
53226550	Cookie, marshmallow, with rice cereal and chocolate chips
53226600	Cookie, marshmallow and peanut butter, with oat cereal (no-bake)
53227000	Cookie, marshmallow pies, non-chocolate coating
53228000	Cookie, meringue
53230000	Cookie, molasses
53231000	Cookie, Lebkuchen
53231400	Cookie, multigrain, high fiber
53233000	Cookie, oatmeal
53233010	Cookie, oatmeal, with raisins
53233020	Cookie, oatmeal, with fruit filling
53233030	Cookie, oatmeal, fat free, with raisins
53233040	Cookie, oatmeal, reduced fat, with raisins
53233050	Cookie, oatmeal sandwich, with creme filling
53233060	Cookie, oatmeal, with chocolate chips
53233080	Cookie, oatmeal sandwich, with peanut butter and jelly filling
53233100	Cookie, oatmeal, with chocolate and peanut butter (no-bake)
53233500	Cookie, oat bran
53234000	Cookie, peanut butter
53234010	Cookie, peanut butter, with oatmeal
53234100	Cookie, peanut butter, with chocolate
53234250	Cookie, peanut butter with rice cereal (no-bake)
53235000	Cookie, peanut
53235500	Cookie, with peanut butter filling, chocolate-coated

53236000	Cookie, pizzelle (Italian style wafer)
53236100	Cookie, pumpkin
53237000	Cookie, raisin
53237010	Cookie, raisin sandwich, cream-filled
53237500	Cookie, rum ball (no-bake)
53238000	Cookie, sandwich-type, not chocolate or vanilla
53239000	Cookie, shortbread
53239010	Cookie, shortbread, reduced fat
53239050	Cookie, shortbread, with chocolate filling
53241500	Cookie, butter or sugar cookie
53241600	Cookie, butter or sugar cookie, with fruit and/or nuts
53242000	Cookie, sugar wafer
53242500	Cookie, toffee bar
53243000	Cookie, vanilla sandwich
53243050	Cookie, vanilla sandwich, reduced fat
53243100	Cookie, rich, all chocolate, with chocolate filling or chocolate chips
53244010	Cookie, butter or sugar, with chocolate icing or filling
53244020	Cookie, butter or sugar, with icing or filling other than chocolate
53245000	Cookie, vanilla waffle creme
53246000	Cookie, tea, Japanese
53247000	Cookie, vanilla wafer
53247050	Cookie, vanilla wafer, reduced fat
53247500	Cookie, vanilla with caramel, coconut, and chocolate coating
53251100	Cookie, rugelach
53260030	Cookie, dietetic, chocolate chip
53260150	Cookie, lemon wafer, lowfat
53260200	Cookie, dietetic, oatmeal with raisins
53260300	Cookie, dietetic, sandwich type
53260400	Cookie, dietetic, sugar or plain
53270100	Cookies, Puerto Rican (Mantecaditos polvorones)
53300100	Pie, NFS
53300170	Pie, individual size or tart, NFS
53301000	Pie, apple, two crust
53301070	Pie, apple, individual size or tart
53301080	Pie, apple, fried pie
53301500	Pie, apple, one crust
53301750	Pie, apple, diet
53302000	Pie, apricot, two crust
53302070	Pie, apricot, individual size or tart
53303000	Pie, blackberry, two crust
53303070	Pie, blackberry, individual size or tart
53303500	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry; two crust
53303510	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry; one crust
53303570	Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry, individual size or tart
53304000	Pie, blueberry, two crust
53304050	Pie, blueberry, one crust
53304070	Pie, blueberry, individual size or tart
53305000	Pie, cherry, two crust
53305010	Pie, cherry, one crust
53305070	Pie, cherry, individual size or tart
53305080	Pie, cherry, fried pie
53305700	Pie, lemon (not cream or meringue)
53305720	Pie, lemon (not cream or meringue), individual size or tart
53306000	Pie, mince, two crust
53306070	Pie, mince, individual size or tart

53307000	Pie, peach, two crust
53307050	Pie, peach, one crust
53307070	Pie, peach, individual size or tart
53307080	Pie, peach, fried pie
53307500	Pie, pear, two crust
53308000	Pie, pineapple, two crust
53308070	Pie, pineapple, individual size or tart
53308500	Pie, prune, one crust
53309000	Pie, raisin, two crust
53310000	Pie, raspberry, one crust
53310050	Pie, raspberry, two crust
53311000	Pie, rhubarb, two crust
53311050	Pie, rhubarb, one crust
53312000	Pie, strawberry, one crust
53313000	Pie, strawberry-rhubarb, two crust
53314000	Pie, strawberry, individual size or tart
53340500	Pie, cherry, made with cream cheese and sour cream
53341000	Pie, banana cream
53341500	Pie, buttermilk
53341750	Pie, chess
53342000	Pie, chocolate cream
53342070	Pie, chocolate cream, individual size or tart
53343000	Pie, coconut cream
53343070	Pie, coconut cream, individual size or tart
53344000	Pie, custard
53344200	Mixed fruit tart filled with custard or cream cheese
53345000	Pie, lemon cream
53345070	Pie, lemon cream, individual size or tart
53346000	Pie, peanut butter cream
53346500	Pie, pineapple cream
53347000	Pie, pumpkin
53347070	Pie, pumpkin, individual size or tart
53347100	Pie, raspberry cream
53347600	Pie, squash
53348000	Pie, strawberry cream
53360000	Pie, sweetpotato
53365000	Pie, vanilla cream
53366000	Pie, yogurt, frozen
53370000	Pie, chiffon, not chocolate
53381000	Pie, lemon meringue
53382000	Pie, chocolate-marshmallow
53385000	Pie, pecan
53385070	Pie, pecan, individual size or tart
53385500	Pie, oatmeal
53386000	Pie, pudding, flavors other than chocolate
53386050	Pie, pudding, flavors other than chocolate, individual size or tart
53386250	Pie, pudding, chocolate, with chocolate coating, individual size
53387000	Pie, Toll house chocolate chip
53390000	Pie, shoo-fly
53391000	Pie shell
53400200	Blintz, cheese-filled
53400300	Blintz, fruit-filled
53410100	Cobbler, apple
53410300	Cobbler, berry
53410500	Cobbler, cherry
53410800	Cobbler, peach
53410850	Cobbler, pear
53410860	Cobbler, pineapple

53410900	Cobbler, rhubarb
53415100	Crisp, apple, apple dessert
53415120	Fritter, apple
53415200	Fritter, banana
53415300	Crisp, blueberry
53415400	Crisp, cherry
53415500	Crisp, peach
53415600	Crisp, rhubarb
53420000	Cream puff, eclair, custard or cream filled, NS as to icing
53420100	Cream puff, eclair, custard or cream filled, not iced
53420200	Cream puff, eclair, custard or cream filled, iced
53420210	Cream puff, eclair, custard or cream filled, iced, reduced fat
53420250	Cream puff, no filling or icing
53420300	Air filled fritter or fried puff, without syrup, Puerto Rican style (Bunuelos de viento)
53420400	Sopaipilla, without syrup or honey
53420410	Sopaipilla with syrup or honey
53430100	Crepe, dessert type, chocolate-filled
53430200	Crepe, dessert type, fruit-filled
53430250	Crepe suzette
53430750	Tamale, sweet, with fruit
53440000	Strudel, apple
53440300	Strudel, berry
53440500	Strudel, cherry
53440600	Strudel, cheese
53440800	Strudel, cheese and fruit
53441110	Baklava
53441210	Basbousa (semolina dessert dish)
53450000	Turnover or dumpling, apple
53450300	Turnover or dumpling, berry
53450500	Turnover or dumpling, cherry
53450800	Turnover or dumpling, lemon
53451000	Turnover or dumpling, peach
53451750	Turnover, pumpkin
53452100	Pastry, fruit-filled
53452170	Pastry, cookie type, fried
53452200	Pastry, Italian, with cheese
53452400	Pastry, puff
53452420	Pastry, puff, custard or cream filled, iced or not iced
53452450	Cheese pastry puffs
53452500	Pastry, mainly flour and water, fried
53453150	Empanada, Mexican turnover, fruit-filled
53453170	Empanada, Mexican turnover, pumpkin
53500100	Breakfast pastry, NFS
53510000	Danish pastry, plain or spice
53510100	Danish pastry, with fruit
53510200	Danish pastry, with nuts
53511000	Danish pastry, with cheese
53511500	Danish pastry, with cheese, fat free, cholesterol free
53520000	Doughnut, NS as to cake or yeast
53520110	Doughnut, cake type
53520120	Doughnut, chocolate, cake type
53520140	Doughnut, cake type, chocolate covered
53520150	Doughnut, cake type, chocolate covered, dipped in peanuts
53520160	Doughnut, chocolate, cake type, with chocolate icing
53520200	Churros
53520600	Cruller, NFS
53520700	French cruller
53521100	Doughnut, chocolate, raised or yeast, with chocolate icing

53521110	Doughnut, raised or yeast
53521120	Doughnut, chocolate, raised or yeast
53521130	Doughnut, raised or yeast, chocolate covered
53521140	Doughnut, jelly
53521210	Doughnut, custard-filled
53521220	Doughnut, chocolate cream-filled
53521230	Doughnut, custard-filled, with icing
53521250	Doughnut, wheat
53521300	Doughnut, wheat, chocolate covered
53530000	Breakfast tart
53530010	Breakfast tart, lowfat
53540000	Breakfast bar, NFS
53540200	Breakfast bar, cereal crust with fruit filling, lowfat
53540250	Breakfast bar, cereal crust with fruit filling, fat free
53540300	Fiber One Chewy Bar
53540400	Kellogg's Nutri-Grain Cereal Bar
53540402	Kellogg's Nutri-Grain Yogurt Bar
53540404	Kellogg's Nutri-Grain Fruit and Nut Bar
53540500	Breakfast bar, date, with yogurt coating
53540600	Milk 'n Cereal bar
53540700	Kellogg's Special K bar
53540800	Kashi GOLEAN Chewy Bars
53540802	Kashi TLC Chewy Granola Bar
53540804	Kashi GOLEAN Crunchy Bars
53542000	Snack bar, oatmeal
53542100	Granola bar, oats, sugar, raisins, coconut
53542200	Granola bar, oats, fruit and nuts, lowfat
53542210	Granola bar, nonfat
53543000	Granola bar, oats, reduced sugar
53543100	Granola bar, peanuts, oats, sugar, wheat germ
53544200	Granola bar, chocolate-coated
53544210	Granola bar, with coconut, chocolate-coated
53544220	Granola bar with nuts, chocolate-coated
53544230	Granola bar, oats, nuts, coated with non-chocolate coating
53544250	Granola bar, coated with non-chocolate coating
53544300	Granola bar, high fiber, coated with non-chocolate yogurt coating
53544400	Granola bar, with rice cereal
53544410	Quaker Granola Bites
53610000	Coffee cake, NFS
53610100	Coffee cake, crumb or quick-bread type
53610120	Coffee cake, crumb or quick-bread type, reduced fat, cholesterol free
53610170	Coffee cake, crumb or quick-bread type, with fruit
53610200	Coffee cake, crumb or quick-bread type, cheese-filled
54001000	Crackers, NS as to sweet or nonsweet
54101010	Cracker, animal
54102010	Crackers, graham
54102020	Crackers, graham, chocolate covered
54102050	Crackers, oatmeal
54102060	Crackers, Cuban
54102100	Crackers, graham, lowfat
54102110	Crackers, graham, fat free
54102200	Crackers, graham, sandwich-type, with filling
54201010	Crackers, matzo, low sodium
54202010	Crackers, saltine, low sodium
54202050	Crackers, saltine, fat free, low sodium
54203010	Crackers, toast thins (rye, wheat, white flour), low sodium
54204010	Cracker, 100% whole wheat, low sodium
54205010	Cracker, snack, low sodium



54205030	Cracker, cheese, low sodium
54205100	Cracker, snack, lowfat, low sodium
54210010	Cracker, multigrain, salt free
54301000	Cracker, snack
54301100	Cracker, snack, reduced fat
54301200	Cracker, snack, fat free
54304000	Cracker, cheese
54304100	Cracker, cheese, reduced fat
54304500	Cracker, high fiber, no added fat
54305000	Crispbread, wheat, no added fat
54305500	Crispbread, wheat or rye, extra crispy
54307000	Crackers, matzo
54308000	Crackers, milk
54309000	Crackers, oat
54313000	Crackers, oyster
54318500	Rice cake, cracker-type
54319000	Crackers, rice
54319010	Puffed rice cake
54319020	Popcorn cake
54322000	Crispbread, rye, no added fat
54325000	Crackers, saltine
54325050	Crackers, saltine, whole wheat
54327950	Crackers, cylindrical, peanut-butter filled
54328000	Crackers, sandwich-type, NFS
54328100	Cracker, sandwich-type, peanut butter filled
54328110	Cracker, sandwich-type, peanut butter filled, reduced fat
54328200	Cracker, sandwich-type, cheese-filled
54334000	Crackers, toast thins (rye, pumpernickel, white flour)
54336000	Crackers, water biscuits
54337000	Cracker, 100% whole wheat
54337050	Cracker, 100% whole wheat, reduced fat
54337100	Crackers, whole wheat and bran
54338000	Crackers, wheat
54338100	Crackers, wheat, reduced fat
54402200	Salty snack mixture, mostly corn or cornmeal based, with pretzels, without nuts*
54402700	Pita chips
54408000	Pretzels, NFS
54408010	Pretzels, hard
54408020	Pretzels, soft
54408030	Pretzel, hard, unsalted
54408040	Pretzels, soft, unsalted
54408200	Pretzel, hard, chocolate-coated*
54408250	Pretzel, yogurt-covered*
54408300	Pretzels, cheese-filled
54420010	Multigrain mixture, pretzels, cereal and/or crackers, nuts*
54420200	Multigrain mixture, bread sticks, sesame nuggets, pretzels, rye chips
54440010	Bagel chip
55101000	Pancakes, plain
55101010	Pancakes, reduced calorie, high fiber
55101020	Pancakes, plain, fat free
55103000	Pancakes, with fruit
55103100	Pancakes, with chocolate chips
55105000	Pancakes, buckwheat
55105100	Pancakes, cornmeal
55105200	Pancakes, whole wheat
55105300	Pancakes, sour dough
55201000	Waffle, plain
55202000	Waffle, wheat, bran, or multigrain

55203000	Waffle, fruit
55203500	Waffle, nut and honey
55203600	Waffle, chocolate chip
55204000	Waffle, cornmeal
55205000	Waffle, 100% whole wheat or 100% whole grain
55206000	Waffle, oat bran
55211000	Waffle, plain, fat free
55211050	Waffle, plain, lowfat
55301000	French toast, plain
55301050	French toast sticks, plain
55401000	Crepe, plain
55501000	Flour and water patty
55702000	Cake or pancake made with rice flour and/or dried beans
55703000	Cake made with glutinous rice and dried beans
55801000	Funnel cake
58100100	Burrito with beef, no beans*
58100110	Burrito with beef and beans*
58100120	Burrito with beef, beans, and cheese*
58100130	Burrito with beef and cheese, no beans*
58100140	Burrito with beef, beans, cheese, and sour cream*
58100150	Burrito with beef and potato, no beans*
58100155	Burrito with beef, rice, and cheese*
58100160	Burrito with beef, beans, rice, and cheese*
58100180	Burrito with pork and beans*
58100200	Burrito with chicken, no beans*
58100210	Burrito with chicken and beans*
58100220	Burrito with chicken, beans, and cheese*
58100230	Burrito with chicken and cheese*
58100240	Burrito with chicken, NFS*
58100245	Burrito with chicken, beans, cheese, and sour cream*
58100250	Burrito with chicken, rice, and cheese*
58100255	Burrito with chicken, beans, rice, and cheese*
58100300	Burrito with beans and rice, meatless*
58100310	Burrito with beans, meatless*
58100320	Burrito with beans and cheese, meatless*
58100330	Burrito with rice, beans, cheese, sour cream, lettuce, tomato and guacamole, meatless*
58100340	Burrito with eggs, sausage, cheese and vegetables*
58100350	Burrito with eggs and cheese, no beans*
58100410	Burrito with beef, cheese, and sour cream*
58101350	Soft taco with beef, cheese, lettuce, tomato and sour cream*
58101400	Soft taco with beef, cheese, and lettuce*
58101450	Soft taco with chicken, cheese, and lettuce*
58101460	Soft taco with chicken, cheese, lettuce, tomato and sour cream*
58101530	Soft taco with beef, cheese, lettuce, tomato and salsa*
58101930	Taco or tostada salad with beef, beans and cheese, fried flour tortilla*
58101940	Taco or tostada salad, meatless, with cheese, fried flour tortilla*
58104260	Chalupa with beans, cheese, lettuce and tomato*
58104280	Chalupa with beef, cheese, lettuce, tomato and sour cream*
58104290	Chalupa with beef, cheese, lettuce, tomato and salsa*
58104310	Chalupa with beans, chicken, cheese, lettuce and tomato*
58104320	Chalupa with chicken, cheese, lettuce, tomato and sour cream*
58104340	Chalupa with chicken, cheese, lettuce, tomato and salsa*
58104450	Chimichanga with beef and tomato*
58104500	Chimichanga with beef, beans, lettuce and tomato*
58104510	Chimichanga with beef, cheese, lettuce and tomato*
58104520	Chimichanga with beans and cheese, meatless, with lettuce and tomato*
58104530	Chimichanga with chicken and cheese*
58104550	Chimichanga with chicken, sour cream, lettuce and tomato, no cheese*

58104600	Chimichanga with beef and rice*
58104710	Quesadilla with cheese, meatless*
58104730	Quesadilla with meat and cheese*
58104740	Quesadilla with poultry and cheese*
58105000	Fajita with chicken and vegetables*
58105050	Fajita with beef and vegetables*
58123120	Sweet bread dough, filled with bean paste, meatless, steamed*
58127210	Croissant sandwich, filled with ham and cheese*
58127270	Croissant sandwich with sausage and egg*
58127290	Croissant sandwich with bacon and egg*
58127310	Croissant sandwich with ham, egg, and cheese*
58127330	Croissant sandwich with sausage, egg, and cheese*
58127350	Croissant sandwich with bacon, egg, and cheese*
58127500	Vegetable submarine sandwich*
58200100	Wrap sandwich, filled with meat, poultry, or fish, vegetables, and rice*
58200250	Wrap sandwich, filled with vegetables*
58200300	Wrap sandwich, filled with meat, poultry, or fish, vegetables, rice, and cheese*
58310210	Sausage and french toast (frozen meal)*

**Dairy**

Food Code	Food Description
11115000	Buttermilk, fluid, nonfat
11115100	Buttermilk, fluid, 1% fat
11115200	Buttermilk, fluid, 2% fat
11120000	Milk, dry, reconstituted, NFS
11121100	Milk, dry, reconstituted, whole
11121210	Milk, dry, reconstituted, lowfat
11121300	Milk, dry, reconstituted, nonfat
11210000	Milk, evaporated, NS as to fat content and dilution
11210050	Milk, evaporated, NS as to fat content and dilution, used in coffee or tea (assume undiluted)
11210100	Milk, evaporated, NS as to fat content, undiluted
11211000	Milk, evaporated, whole, NS as to dilution
11211050	Milk, evaporated, whole, NS as to dilution, used in coffee or tea
11211400	Milk, evaporated, 2% fat, NS as to dilution
11212000	Milk, evaporated, skim, NS as to dilution
11212050	Milk, evaporated, skim, NS as to dilution, used in coffee or tea
11212100	Milk, evaporated, skim, undiluted
11220000	Milk, condensed, sweetened, NS as to dilution
11220100	Milk, condensed, sweetened, undiluted
11220200	Milk, condensed, sweetened, diluted
11320000	Milk, soy, ready-to-drink, not baby's
11320100	Milk, soy, light, ready-to-drink, not baby's
11320200	Milk, soy, nonfat, ready-to-drink, not baby's
11321000	Milk, soy, ready-to-drink, not baby's, chocolate
11321100	Milk, soy, light, ready-to-drink, not baby's, chocolate
11340000	Milk, imitation, fluid, non-soy, sweetened, flavors other than chocolate
11410000	Yogurt, NS as to type of milk or flavor
11411010	Yogurt, plain, NS as to type of milk
11411100	Yogurt, plain, whole milk
11411200	Yogurt, plain, lowfat milk
11411300	Yogurt, plain, nonfat milk
11420000	Yogurt, vanilla, lemon, or coffee flavor, NS as to type of milk
11421000	Yogurt, vanilla, lemon, or coffee flavor, whole milk
11422000	Yogurt, vanilla, lemon, maple, or coffee flavor, lowfat milk
11423000	Yogurt, vanilla, lemon, maple, or coffee flavor, nonfat milk
11424000	Yogurt, vanilla, lemon, maple, or coffee flavor, nonfat milk, sweetened with low calorie sweetener
11425000	Yogurt, chocolate, NS as to type of milk
11426000	Yogurt, chocolate, whole milk

11427000	Yogurt, chocolate, nonfat milk
11430000	Yogurt, fruit variety, NS as to type of milk
11431000	Yogurt, fruit variety, whole milk
11432000	Yogurt, fruit variety, lowfat milk
11432500	Yogurt, fruit variety, lowfat milk, sweetened with low-calorie sweetener
11433000	Yogurt, fruit variety, nonfat milk
11433500	Yogurt, fruit variety, nonfat milk, sweetened with low-calorie sweetener
11445000	Yogurt, fruit and nuts, lowfat milk
11446000	Fruit and lowfat yogurt parfait
11459990	Yogurt, frozen, NS as to flavor, NS as to type of milk
11460000	Yogurt, frozen, flavors other than chocolate, NS as to type of milk
11460100	Yogurt, frozen, chocolate, NS as to type of milk
11460150	Yogurt, frozen, NS as to flavor, lowfat milk
11460160	Yogurt, frozen, chocolate, lowfat milk
11460170	Yogurt, frozen, flavors other than chocolate, lowfat milk
11460200	Yogurt, frozen, chocolate, nonfat milk
11460250	Yogurt, frozen, flavors other than chocolate, with sorbet or sorbet-coated
11460300	Yogurt, frozen, flavors other than chocolate, nonfat milk
11460400	Yogurt, frozen, chocolate, nonfat milk, with low-calorie sweetener
11460410	Yogurt, frozen, flavors other than chocolate, nonfat milk, with low-calorie sweetener
11460440	Yogurt, frozen, flavors other than chocolate, whole milk
11461000	Yogurt, frozen, chocolate-coated
11461250	Yogurt, frozen, cone, chocolate
11461260	Yogurt, frozen, cone, flavors other than chocolate
11461270	Yogurt, frozen, cone, flavors other than chocolate, lowfat milk
11461280	Yogurt, frozen, cone, chocolate, lowfat milk
11511000	Milk, chocolate, NFS
11511100	Milk, chocolate, whole milk-based
11511200	Milk, chocolate, reduced fat milk-based, 2% (formerly "lowfat")
11511300	Milk, chocolate, skim milk-based
11511400	Milk, chocolate, lowfat milk-based
11512000	Cocoa, hot chocolate, not from dry mix, made with whole milk
11512500	Spanish-style hot chocolate drink, Puerto Rican style, made with milk
11512510	Hot chocolate, Puerto Rican style, made with low fat milk
11513000	Cocoa and sugar mixture, milk added, NS as to type of milk
11513100	Cocoa and sugar mixture, whole milk added
11513150	Cocoa and sugar mixture, reduced fat milk added
11513200	Cocoa and sugar mixture, lowfat milk added
11513300	Cocoa and sugar mixture, skim milk added
11513400	Chocolate syrup, milk added, NS as to type of milk
11513500	Chocolate syrup, whole milk added
11513550	Chocolate syrup, reduced fat milk added
11513600	Chocolate syrup, lowfat milk added
11513700	Chocolate syrup, skim milk added
11514100	Cocoa, sugar, and dry milk mixture, water added
11514300	Cocoa with nonfat dry milk and low calorie sweetener, mixture, water added
11514500	Cocoa, whey, and low calorie sweetener, mixture, fortified, water added
11516000	Cocoa, whey, and low-calorie sweetener mixture, lowfat milk added
11519000	Milk beverage, made with whole milk, flavors other than chocolate
11519040	Milk, flavors other than chocolate, NFS
11519050	Milk, flavors other than chocolate, whole milk-based
11519105	Milk, flavors other than chocolate, reduced fat milk-based
11519200	Milk, flavors other than chocolate, lowfat milk-based
11519205	Milk, flavors other than chocolate, skim-milk based
11520000	Milk, malted, unfortified, NS as to flavor, made with milk
11522000	Milk, malted, unfortified, natural flavor, made with milk
11525000	Milk, malted, fortified, natural flavor, made with milk
11526000	Milk, malted, fortified, chocolate, made with milk

11531000	Eggnog, made with whole milk
11531500	Eggnog, made with 2% reduced fat milk (formerly eggnog, made with "2% lowfat" milk)
11541000	Milk shake, NS as to flavor or type
11541100	Milk shake, homemade or fountain-type, NS as to flavor
11541110	Milk shake, homemade or fountain-type, chocolate
11541120	Milk shake, homemade or fountain-type, flavors other than chocolate
11541500	Milk shake, made with skim milk, chocolate
11541510	Milk shake, made with skim milk, flavors other than chocolate
11542100	Carry-out milk shake, chocolate
11542200	Carry-out milk shake, flavors other than chocolate
11551050	Milk fruit drink
11552200	Orange Julius
11553000	Fruit smoothie drink, made with fruit or fruit juice and dairy products
11553100	Fruit smoothie drink, NFS
11560000	Chocolate-flavored drink, whey- and milk-based
11560020	Flavored milk drink, whey- and milk-based, flavors other than chocolate
11611000	Instant breakfast, fluid, canned
11612000	Instant breakfast, powder, milk added
11613000	Instant breakfast, powder, sweetened with low calorie sweetener, milk added
11623000	Meal supplement or replacement, commercially prepared, ready-to-drink
11631000	High calorie beverage, canned or powdered, reconstituted
11641000	Meal supplement or replacement, milk-based, high protein, liquid
11641020	Meal replacement or supplement, milk based, ready-to-drink
11810000	Milk, dry, not reconstituted, NS as to whole, lowfat, or nonfat
11811000	Milk, dry, whole, not reconstituted
11812000	Milk, dry, lowfat, not reconstituted
11813000	Milk, dry, nonfat, not reconstituted
11825000	Whey, sweet, dry
11830100	Cocoa (or chocolate) with dry milk and sugar, dry mix, not reconstituted
11830110	Cocoa powder with nonfat dry milk and low calorie sweetener, dry mix, not reconstituted
11830120	Cocoa, whey, and low calorie sweetener, fortified, dry mix, not reconstituted
11830150	Cocoa powder, not reconstituted (no dry milk)
11830160	Cocoa (or chocolate) flavored beverage powder with sugar, dry mix, not reconstituted
11830170	Cocoa, whey, and low-calorie sweetener mixture, not reconstituted
11830200	Milk, malted, dry mix, unfortified, not reconstituted, flavors other than chocolate
11830210	Milk, malted, dry mix, fortified, not reconstituted, flavors other than chocolate
11830260	Milk, malted, dry mix, fortified, not reconstituted, chocolate
11830400	Milk beverage, powder, dry mix, not reconstituted, flavors other than chocolate
11830550	Milk beverage, powder, with nonfat dry milk and low calorie sweetener, dry mix, not reconstituted, flavors other than chocolate
11830800	Instant breakfast, powder, not reconstituted
11830810	Instant breakfast, powder, sweetened with low calorie sweetener, not reconstituted
11830900	Protein supplement, milk-based, powdered, not reconstituted
11830940	Meal replacement, high protein, milk based, fruit juice mixable formula, powdered, not reconstituted
11830970	Meal replacement, protein type, milk-based, powdered, not reconstituted
11830990	Nutrient supplement, milk-based, powdered, not reconstituted
11831500	Nutrient supplement, milk-based, high protein, powdered, not reconstituted
11832000	Meal replacement, protein type, milk- and soy-based, powdered, not reconstituted
11836000	Protein supplement, milk-based, Muscle Milk, powdered, not reconstituted
11836100	Protein supplement, milk-based, Muscle Milk Light, powdered, not reconstituted
12100100	Cream, NS as to light, heavy, or half and half
12110100	Cream, light, fluid
12110300	Cream, light, whipped, unsweetened
12120100	Cream, half and half
12120105	Cream, half and half, low fat
12120110	Cream, half and half, fat free
12130100	Cream, heavy, fluid

12130200	Cream, heavy, whipped, unsweetened
12140000	Cream, heavy, whipped, sweetened
12140100	Cream, whipped, pressurized container
12140105	Cream, whipped, pressurized container, light
12140110	Whipped topping, dairy based, fat free, pressurized container
12200100	Cream substitute, NS as to frozen, liquid, or powdered
12210100	Cream substitute, frozen
12210200	Cream substitute, liquid
12210210	Cream substitute, flavored, liquid
12210250	Cream substitute, light, liquid
12210255	Cream substitute, light, flavored, liquid
12210260	Cream substitute, fat free, liquid
12210270	Cream substitute, fat free, flavored, liquid
12210310	Cream substitute, sugar free, flavored, liquid
12210400	Cream substitute, powdered
12210410	Cream substitute, light, powdered
12210420	Cream substitute, flavored, powdered
12210430	Cream substitute, fat free, powder
12210440	Cream substitute, fat free, flavored, powder
12210500	Cream substitute, sugar free, powder
12210505	Cream substitute, sugar free, flavored, powder
12220000	Whipped topping, nondairy, NS as to canned, frozen, or made from powdered mix
12220100	Whipped topping, nondairy, pressurized can
12220200	Whipped topping, nondairy, frozen
12220250	Whipped topping, nondairy, frozen, lowfat
12220270	Whipped topping, non dairy, frozen, fat free
12220280	Whipped topping, nondairy, frozen, sugar free
12220300	Whipped cream substitute, nondairy, made from powdered mix
12220400	Whipped cream substitute, nondairy, lowfat, low sugar, made from powdered mix
12310100	Sour cream
12310300	Sour cream, reduced fat
12310350	Sour cream, light
12310370	Sour cream, fat free
12350000	Dip, sour cream base
12350020	Dip, sour cream base, reduced calorie
12350100	Spinach dip, sour cream base
13110000	Ice cream, NFS
13110100	Ice cream, regular, flavors other than chocolate
13110110	Ice cream, regular, chocolate
13110120	Ice cream, rich, flavors other than chocolate
13110130	Ice cream, rich, chocolate
13110200	Ice cream, soft serve, flavors other than chocolate
13110210	Ice cream, soft serve, chocolate
13110220	Ice cream, soft serve, NS as to flavor
13110320	Ice cream, no sugar added, flavors other than chocolate
13110330	Ice cream, no sugar added, chocolate
13120050	Ice cream bar or stick, not chocolate covered or cake covered
13120100	Ice cream bar or stick, chocolate covered
13120110	Ice cream bar or stick, chocolate or caramel covered, with nuts
13120120	Ice cream bar or stick, rich chocolate ice cream, thick chocolate covering
13120121	Ice cream bar or stick, rich ice cream, thick chocolate covering
13120130	Ice cream bar or stick, rich ice cream, chocolate covered, with nuts
13120140	Ice cream bar or stick, chocolate ice cream, chocolate covered
13120300	Ice cream bar, cake covered
13120400	Ice cream bar or stick with fruit
13120500	Ice cream sandwich
13120550	Ice cream cookie sandwich
13120700	Ice cream cone with nuts, flavors other than chocolate

13120710	Ice cream cone, chocolate covered, with nuts, flavors other than chocolate
13120720	Ice cream cone, chocolate covered or dipped, flavors other than chocolate
13120730	Ice cream cone, no topping, flavors other than chocolate
13120740	Ice cream cone, no topping, NS as to flavor
13120750	Ice cream cone with nuts, chocolate ice cream
13120760	Ice cream cone, chocolate covered or dipped, chocolate ice cream
13120770	Ice cream cone, no topping, chocolate ice cream
13120790	Ice cream sundae cone
13120800	Ice cream soda, flavors other than chocolate
13121000	Ice cream sundae, NS as to topping, with whipped cream
13121100	Ice cream sundae, fruit topping, with whipped cream
13121300	Ice cream sundae, chocolate or fudge topping, with whipped cream
13121400	Ice cream sundae, not fruit or chocolate topping, with whipped cream
13122100	Ice cream pie, no crust
13122500	Ice cream pie, with cookie crust, fudge topping, and whipped cream
13126000	Ice cream, fried
13130100	Light ice cream, NS as to flavor (formerly ice milk)
13130300	Light ice cream, flavors other than chocolate (formerly ice milk)
13130310	Light ice cream, chocolate (formerly ice milk)
13130320	Light ice cream, no sugar added, NS as to flavor
13130330	Light ice cream, no sugar added, flavors other than chocolate
13130340	Light ice cream, no sugar added, chocolate
13130590	Light ice cream, soft serve, NS as to flavor (formerly ice milk)
13130600	Light ice cream, soft serve, flavors other than chocolate (formerly ice milk)
13130610	Light ice cream, soft serve, chocolate (formerly ice milk)
13130620	Light ice cream, soft serve cone, flavors other than chocolate (formerly ice milk)
13130630	Light ice cream, soft serve cone, chocolate (formerly ice milk)
13130640	Light ice cream, soft serve cone, NS as to flavor (formerly ice milk)
13130700	Light ice cream, soft serve, blended with candy or cookies
13135000	Light ice cream, sandwich (formerly ice milk)
13135010	Ice cream sandwich, made with light chocolate ice cream
13136000	Ice cream sandwich, made with light, no sugar added ice cream
13140100	Light ice cream, bar or stick, chocolate-coated (formerly ice milk)
13140110	Light ice cream, bar or stick, chocolate covered, with nuts (formerly ice milk)
13140500	Light ice cream, cone, flavors other than chocolate (formerly ice milk)
13140550	Light ice cream, cone, chocolate (formerly ice milk)
13140650	Light ice cream, sundae, soft serve, not fruit or chocolate topping, with whipped cream (formerly ice milk)
13140660	Light ice cream, sundae, soft serve, chocolate or fudge topping (without whipped cream) (formerly ice milk)
13140670	Light ice cream, sundae, soft serve, fruit topping (without whipped cream) (formerly ice milk)
13140680	Light ice cream, sundae, soft serve, not fruit or chocolate topping (without whipped cream) (formerly ice milk)
13140700	Light ice cream, creamsicle or dreamsicle (formerly ice milk)
13140900	Light ice cream, fudgesicle (formerly ice milk)
13142000	Milk dessert bar or stick, frozen, with coconut
13150000	Sherbet, all flavors
13160150	Fat free ice cream, no sugar added, chocolate
13160160	Fat free ice cream, no sugar added, flavors other than chocolate
13160400	Fat free ice cream, flavors other than chocolate
13160410	Fat free ice cream, chocolate
13161000	Milk dessert bar, frozen, made from lowfat milk
13161500	Milk dessert sandwich bar, frozen, made from lowfat milk
13161520	Milk dessert sandwich bar, frozen, with low-calorie sweetener, made from lowfat milk
13161600	Milk dessert bar, frozen, made from lowfat milk and low calorie sweetener
13161630	Light ice cream, bar or stick, with low-calorie sweetener, chocolate-coated (formerly ice milk)
13200110	Pudding, NFS
13210110	Pudding, bread

13210180	Pudding, Mexican bread (Capirotada)
13210220	Pudding, chocolate, ready-to-eat, NS as to from dry mix or canned
13210250	Pudding, chocolate, ready-to-eat, low calorie, containing artificial sweetener, NS as to from dry mix or canned
13210270	Custard, Puerto Rican style (Maicena, Natilla)
13210280	Pudding, flavors other than chocolate, ready-to-eat, NS as to from dry mix or canned
13210290	Pudding, flavors other than chocolate, ready-to-eat, low calorie, containing artificial sweetener, NS as to from dry mix or canned
13210300	Custard
13210350	Custard, Puerto Rican style (Flan)
13210410	Pudding, rice
13210450	Pudding, rice flour, with nuts (Indian dessert)
13210500	Pudding, tapioca, made from home recipe, made with milk
13210520	Pudding, tapioca, made from dry mix, made with milk
13210750	Pudding, pumpkin
13220110	Pudding, flavors other than chocolate, prepared from dry mix, milk added
13220120	Pudding, chocolate, prepared from dry mix, milk added
13220210	Pudding, flavors other than chocolate, prepared from dry mix, low calorie, containing artificial sweetener, milk added
13220220	Pudding, chocolate, prepared from dry mix, low calorie, containing artificial sweetener, milk added
13220230	Pudding, canned, chocolate, reduced fat
13220235	Pudding, canned, chocolate, fat free
13220240	Pudding, canned, flavors other than chocolate, reduced fat
13220245	Pudding, canned, flavors other than chocolate, fat free
13230110	Pudding, canned, flavors other than chocolate
13230120	Pudding, canned, low calorie, containing artificial sweetener, flavors other than chocolate
13230130	Pudding, canned, chocolate
13230140	Pudding, canned, low calorie, containing artificial sweetener, chocolate
13230200	Pudding, canned, chocolate and non-chocolate flavors combined
13230500	Pudding, canned, tapioca
13230510	Pudding, canned, tapioca, fat free
13241000	Pudding, with fruit and vanilla wafers
13250000	Mousse, chocolate
13250100	Mousse, not chocolate
13252200	Milk dessert or milk candy, Puerto Rican style (Dulce de leche)
13252500	Barfi or Burfi, Indian dessert, made from milk and/or cream and/or Ricotta cheese
13252600	Tiramisu
13411000	White sauce, milk sauce
13412000	Milk gravy, quick gravy
14010000	Cheese, NFS
14010100	Cheese, Cheddar or American type, NS as to natural or processed
14100100	Cheese, natural, NFS
14101010	Cheese, Blue or Roquefort
14102010	Cheese, Brick
14103010	Cheese, Camembert
14103020	Cheese, Brie
14104010	Cheese, natural, Cheddar or American type
14104015	Cheese, natural, Cheddar or American type, reduced fat
14104020	Cheese, Cheddar or American type, dry, grated
14104200	Cheese, Colby
14104250	Cheese, Colby Jack
14104400	Cheese, Feta
14104600	Cheese, Fontina
14104700	Cheese, goat
14105010	Cheese, Gouda or Edam
14105200	Cheese, Gruyere
14106200	Cheese, Monterey



14106500	Cheese, Monterey, lowfat
14107010	Cheese, Mozzarella, NFS
14107020	Cheese, Mozzarella, whole milk
14107030	Cheese, Mozzarella, part skim
14107040	Cheese, Mozzarella, low sodium
14107060	Cheese, Mozzarella, nonfat or fat free
14107200	Cheese, Muenster
14107250	Cheese, Muenster, lowfat
14108010	Cheese, Parmesan, dry grated
14108015	Cheese, Parmesan, dry grated, reduced fat
14108020	Cheese, Parmesan, hard
14108060	Parmesan cheese topping, fat free
14108200	Cheese, Port du Salut
14108400	Cheese, Provolone
14108420	Cheese, provolone, reduced fat
14109010	Cheese, Swiss
14109020	Cheese, Swiss, low sodium
14109030	Cheese, Swiss, lowfat
14110010	Cheese, Cheddar or Colby, low sodium
14110030	Cheese, Cheddar or Colby, lowfat
14120010	Cheese, Mexican blend
14120020	Cheese, Mexican blend, reduced fat
14131000	Queso Anejo (aged Mexican cheese)
14131500	Queso Asadero
14132000	Queso Chihuahua
14133000	Queso Fresco
14200100	Cheese, cottage, NFS
14201010	Cheese, cottage, creamed, large or small curd
14201500	Cheese, Ricotta
14202010	Cheese, cottage, with fruit
14202020	Cheese, cottage, with vegetables
14203010	Cheese, cottage, dry curd
14203020	Cheese, cottage, salted, dry curd
14203510	Puerto Rican white cheese (queso del pais, blanco)
14204010	Cheese, cottage, lowfat (1-2% fat)
14204020	Cheese, cottage, lowfat, with fruit
14301010	Cheese, cream
14303010	Cheese, cream, light or lite (formerly called Cream Cheese Lowfat)
14410100	Cheese, processed, American and Swiss blends
14410200	Cheese, processed, American or Cheddar type
14410210	Cheese, processed, American or Cheddar type, low sodium
14410300	Cheese, processed, American or Cheddar type, lowfat
14410330	Cheese, processed cheese product, American or Cheddar type, reduced fat
14410350	Cheese, processed, American or Cheddar type, nonfat or fat free
14410380	Cheese, processed cream cheese product, nonfat or fat free
14410400	Cheese, processed, Swiss
14410420	Cheese, processed, Swiss, lowfat
14410500	Cheese, processed cheese food
14410600	Cheese, processed, with vegetables
14410620	Cheese, processed, with wine
14420000	Cheese spread, NFS
14420100	Cheese spread, American or Cheddar cheese base
14420160	Cheese spread, Swiss cheese base
14420200	Cheese spread, cream cheese, regular
14420210	Cheese spread, cream cheese, light or lite
14420300	Cheese spread, pressurized can
14502010	Imitation cheese, American or cheddar type
14502040	Imitation cheese, American or cheddar type, low cholesterol

14610200	Cheese, cottage cheese, with gelatin dessert
14610210	Cheese, cottage cheese, with gelatin dessert and fruit
14610250	Cheese, cottage cheese, with gelatin dessert and vegetables
14610520	Cheese with nuts
14620100	Dip, cream cheese base
14620120	Shrimp dip, cream cheese base
14620150	Dip, cheese with chili pepper (chili con queso)
14620200	Dip, cheese base other than cream cheese
14620300	Topping from cheese pizza*
14620310	Topping from vegetable pizza*
14620320	Topping from meat pizza*
14620330	Topping from meat and vegetable pizza*
14630100	Cheese fondue
14630200	Cheese souffle
14630300	Welsh rarebit
14640100	Cheese sandwich, grilled*
14650100	Cheese sauce
14650160	Alfredo sauce
14660200	Cheese, nuggets or pieces, breaded, baked, or fried
14710100	Cheddar cheese soup
14710200	Beer soup, made with milk
24198710	Chicken patty with cheese, breaded, cooked
25220150	Beef sausage with cheese, smoked*
25220360	Bratwurst, with cheese*
27111430	Chili con carne, NS as to beans, with cheese*
27111440	Chili con carne with beans and cheese*
27113100	Beef stroganoff*
27135110	Veal parmigiana*
27146250	Chicken or turkey cordon bleu*
27146300	Chicken or turkey parmigiana*
27212350	Beef stroganoff with noodles*
27242350	Chicken or turkey tetrazzini*
27443150	Chicken or turkey divan*
27446320	Chicken or turkey (breaded, fried) garden salad with bacon (chicken and/or turkey, bacon, cheese, lettuce and/or greens, tomato and/or carrots, other vegetables), no dressing*
27446360	Chicken or turkey caesar garden salad (chicken and/or turkey, lettuce, tomato, cheese), no dressing*
27446400	Chicken or turkey and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), cheese sauce (mixture)*
27450090	Tuna salad with cheese*
27460490	Julienne salad (meat, cheese, eggs, vegetables), no dressing*
27460510	Antipasto with ham, fish, cheese, vegetables*
27500200	Wrap sandwich, filled with meat, poultry, or fish, vegetables, and cheese*
27500300	Wrap sandwich, filled with meat, poultry, or fish, and vegetables*
27510210	Cheeseburger, plain, on bun*
27510220	Cheeseburger, with mayonnaise or salad dressing, on bun*
27510230	Cheeseburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510240	Cheeseburger, 1/4 lb meat, plain, on bun*
27510250	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing, on bun*
27510260	Cheeseburger, 1/4 lb meat, with mushrooms in sauce, on bun*
27510280	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on bun*
27510290	Double cheeseburger (2 patties), plain, on double-decker bun*
27510300	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on double-decker bun*
27510310	Cheeseburger with tomato and/or catsup, on bun*
27510311	Cheeseburger, 1 oz meat, plain, on miniature bun*
27510320	Cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510330	Double cheeseburger (2 patties), with tomato and/or catsup, on bun*
27510340	Double cheeseburger (2 patties), with mayonnaise or salad dressing and tomatoes, on bun*

27510350	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510360	Cheeseburger with mayonnaise or salad dressing, tomato and bacon, on bun*
27510370	Double cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510375	Double cheeseburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510380	Triple cheeseburger (3 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510390	Double bacon cheeseburger (2 patties, 1/4 lb meat each), on bun*
27510400	Bacon cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510420	Taco burger, on bun*
27510425	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510430	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510440	Bacon cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510450	Cheeseburger, 1/4 lb meat, with ham, on bun*
27510700	Meatball and spaghetti sauce submarine sandwich*
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread*
27513050	Roast beef sandwich with cheese*
27515020	Steak and cheese submarine sandwich, with lettuce and tomato*
27515040	Steak and cheese submarine sandwich, plain, on roll*
27515070	Steak and cheese submarine sandwich, with fried peppers and onions, on roll*
27520135	Bacon, chicken, and tomato club sandwich, with cheese, lettuce and spread*
27520165	Bacon, chicken fillet (breaded, fried), and tomato club with lettuce and spread*
27520166	Bacon, chicken fillet (breaded, fried), and tomato club sandwich with cheese, lettuce and spread*
27520320	Ham and cheese sandwich, with lettuce and spread*
27520350	Ham and cheese sandwich, with spread, grilled*
27520360	Ham and cheese sandwich, on bun, with lettuce and spread*
27520370	Hot ham and cheese sandwich, on bun*
27520390	Ham and cheese submarine sandwich, on multigrain roll, with lettuce, tomato and spread*
27540200	Fajita-style chicken sandwich with cheese, on pita bread, with lettuce and tomato*
27540210	Wrap sandwich filled with chicken strips (breaded, fried), cheese, lettuce, and spread*
27540230	Chicken patty sandwich with cheese, on wheat bun, with lettuce, tomato and spread*
27540250	Chicken fillet, broiled, sandwich with cheese, on whole wheat roll, with lettuce, tomato and non-mayonaise type spread*
27540280	Chicken fillet, broiled, sandwich with cheese, on bun, with lettuce, tomato and spread*
27540300	Wrap sandwich filled with chicken strips (broiled), cheese, lettuce, and spread*
27540350	Turkey submarine sandwich, with cheese, lettuce, tomato and spread*
27550100	Fish sandwich, on bun, with cheese and spread*
27560330	Frankfurter or hot dog, with cheese, plain, on bun*
27560370	Frankfurter or hot dog with chili and cheese, on bun*
27560670	Sausage and cheese on English muffin*
27560705	Sausage balls (made with biscuit mix and cheese)*
27560910	Submarine, cold cut sandwich, with lettuce and tomato*
28110370	Salisbury steak with gravy, macaroni and cheese, vegetable (frozen meal)*
28110380	Salisbury steak with gravy, macaroni and cheese (frozen meal)*
28110660	Meatballs, Swedish, in gravy, with noodles (diet frozen meal)*
28113110	Salisbury steak, baked, with tomato sauce, vegetable (diet frozen meal)*
28133110	Veal, breaded, with spaghetti, in tomato sauce (frozen meal)*
28140150	Chicken divan (frozen meal)*
28140730	Chicken patty, breaded, with tomato sauce and cheese, fettuccine alfredo, vegetable (frozen meal)*
28141050	Chicken patty parmigiana, breaded, with vegetable (diet frozen meal)*
28141650	Chicken and vegetables au gratin with rice-vegetable mixture (diet frozen entree)*
28143080	Chicken with noodles and cheese sauce (diet frozen meal)*
28143150	Chicken and vegetable entree with noodles (diet frozen meal)*
28143170	Chicken in cream sauce with noodles and vegetable (frozen meal)*
28143220	Chicken in barbecue sauce, with rice, vegetable and dessert, reduced fat and sodium (diet frozen meal)*

	meal)*
28144100	Chicken and vegetable entree with noodles and cream sauce (frozen meal)*
28145710	Turkey tetrazzini (frozen meal)*
28150210	Haddock with chopped spinach (diet frozen meal)*
28150220	Flounder with chopped broccoli (diet frozen meal)*
32105010	Egg omelet or scrambled egg, with cheese*
32105055	Egg omelet or scrambled egg, with cheese and vegetables other than dark-green*
32105080	Egg omelet or scrambled egg, with cheese and ham or bacon*
32105085	Egg omelet or scrambled egg, with cheese, ham or bacon, and tomatoes*
32105121	Egg omelet or scrambled egg, with sausage and cheese*
32105190	Egg casserole with bread, cheese, milk and meat*
32202010	Egg, cheese, and ham on English muffin*
32202020	Egg, cheese, and ham on biscuit*
32202025	Egg, cheese and ham on bagel*
32202030	Egg, cheese, and sausage on English muffin*
32202035	Egg, cheese, and sausage on bun*
32202040	Egg, cheese, and beef on English Muffin*
32202045	Egg, cheese, and steak on bagel*
32202050	Egg, cheese, and sausage on biscuit*
32202055	Egg, cheese, and sausage griddle cake sandwich*
32202070	Egg, cheese, and bacon on biscuit*
32202075	Egg, cheese, and bacon griddle cake sandwich*
32202080	Egg, cheese, and bacon on English muffin*
32202085	Egg, cheese and bacon on bagel*
32202120	Egg, cheese and sausage on bagel*
32202200	Egg and cheese on biscuit*
33201110	Scrambled egg, made from cholesterol-free frozen mixture with cheese*
41205020	Refried beans with cheese*
41812850	Vegetarian stroganoff (made with meat substitute)*
56201060	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, NS as to fat added in cooking*
56201061	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, fat not added in cooking*
56201062	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, fat added in cooking*
56201070	Grits, cooked, corn or hominy, with cheese, regular, NS as to fat added in cooking*
56201071	Grits, cooked, corn or hominy, with cheese, regular, fat not added in cooking*
56201072	Grits, cooked, corn or hominy, with cheese, regular, fat added in cooking*
56201082	Grits, cooked, corn or hominy, with cheese, quick, fat added in cooking*
56201091	Grits, cooked, corn or hominy, with cheese, instant, fat not added in cooking*
56201092	Grits, cooked, corn or hominy, with cheese, instant, fat added in cooking*
58100120	Burrito with beef, beans, and cheese*
58100130	Burrito with beef and cheese, no beans*
58100140	Burrito with beef, beans, cheese, and sour cream*
58100155	Burrito with beef, rice, and cheese*
58100160	Burrito with beef, beans, rice, and cheese*
58100220	Burrito with chicken, beans, and cheese*
58100230	Burrito with chicken and cheese*
58100245	Burrito with chicken, beans, cheese, and sour cream*
58100250	Burrito with chicken, rice, and cheese*
58100255	Burrito with chicken, beans, rice, and cheese*
58100320	Burrito with beans and cheese, meatless*
58100330	Burrito with rice, beans, cheese, sour cream, lettuce, tomato and guacamole, meatless*
58100340	Burrito with eggs, sausage, cheese and vegetables*
58100350	Burrito with eggs and cheese, no beans*
58100360	Chilaquiles, tortilla casserole with salsa, cheese, and egg*
58100370	Chilaquiles, tortilla casserole with salsa and cheese, no egg*
58100410	Burrito with beef, cheese, and sour cream*

58100520	Enchilada with beef, beans, and cheese*
58100530	Enchilada with beef and cheese, no beans*
58100560	Enchilada with ham and cheese, no beans*
58100620	Enchilada with chicken, beans, and cheese, tomato- based sauce*
58100630	Enchilada with chicken and cheese, no beans, tomato- based sauce*
58100720	Enchilada with beans and cheese, meatless*
58100800	Enchilada with cheese, meatless, no beans*
58101300	Taco or tostada with beef, cheese and lettuce*
58101320	Taco or tostada with beef, cheese, lettuce, tomato and salsa*
58101350	Soft taco with beef, cheese, lettuce, tomato and sour cream*
58101400	Soft taco with beef, cheese, and lettuce*
58101450	Soft taco with chicken, cheese, and lettuce*
58101460	Soft taco with chicken, cheese, lettuce, tomato and sour cream*
58101520	Taco or tostada with chicken, cheese, lettuce, tomato and salsa*
58101530	Soft taco with beef, cheese, lettuce, tomato and salsa*
58101720	Taco or tostada with beans and cheese, meatless, with lettuce, tomato and salsa*
58101730	Taco or tostada with beans, cheese, meat, lettuce, tomato and salsa*
58101820	Mexican casserole made with ground beef, beans, tomato sauce, cheese, taco seasonings, and corn chips*
58101830	Mexican casserole made with ground beef, tomato sauce, cheese, taco seasonings, and corn chips*
58101910	Taco or tostada salad with beef and cheese, corn chips*
58101930	Taco or tostada salad with beef, beans and cheese, fried flour tortilla*
58101940	Taco or tostada salad, meatless, with cheese, fried flour tortilla*
58104080	Nachos with beef, beans, cheese, and sour cream*
58104090	Nachos with cheese and sour cream*
58104100	Nachos with cheese, meatless, no beans*
58104120	Nachos with beans and cheese*
58104130	Nachos with beef, beans, and cheese*
58104140	Nachos with beef and cheese*
58104180	Nachos with beef, beans, cheese, tomatoes, sour cream and onions*
58104250	Nachos with chicken or turkey and cheese*
58104260	Chalupa with beans, cheese, lettuce and tomato*
58104280	Chalupa with beef, cheese, lettuce, tomato and sour cream*
58104290	Chalupa with beef, cheese, lettuce, tomato and salsa*
58104310	Chalupa with beans, chicken, cheese, lettuce and tomato*
58104320	Chalupa with chicken, cheese, lettuce, tomato and sour cream*
58104340	Chalupa with chicken, cheese, lettuce, tomato and salsa*
58104510	Chimichanga with beef, cheese, lettuce and tomato*
58104520	Chimichanga with beans and cheese, meatless, with lettuce and tomato*
58104530	Chimichanga with chicken and cheese*
58104550	Chimichanga with chicken, sour cream, lettuce and tomato, no cheese*
58104710	Quesadilla with cheese, meatless*
58104730	Quesadilla with meat and cheese*
58104740	Quesadilla with poultry and cheese*
58105100	Pupusa, cheese-filled*
58105110	Pupusa, meat-filled*
58106200	Pizza, cheese, prepared from frozen, thin crust*
58106205	Pizza, cheese, prepared from frozen, thick crust*
58106210	Pizza, cheese, NS as to type of crust*
58106220	Pizza, cheese, thin crust*
58106225	Pizza, cheese, regular crust*
58106230	Pizza, cheese, thick crust*
58106240	Pizza, extra cheese, NS as to type of crust*
58106250	Pizza, extra cheese, thin crust*
58106260	Pizza, extra cheese, thick crust*
58106300	Pizza, cheese, with vegetables, prepared from frozen, thin crust*
58106305	Pizza, cheese with vegetables, prepared from frozen, thick crust*

58106310	Pizza, cheese, with vegetables, NS as to type of crust*
58106320	Pizza, cheese, with vegetables, thin crust*
58106325	Pizza, cheese, with vegetables, regular crust*
58106330	Pizza, cheese, with vegetables, thick crust*
58106345	Pizza with cheese and extra vegetables, thin crust*
58106350	Pizza with cheese and extra vegetables, thick crust*
58106360	Pizza, cheese, with fruit, thick crust*
58106510	Pizza with meat, NS as to type of crust*
58106520	Pizza with meat, thin crust*
58106530	Pizza with meat, thick crust*
58106780	Pizza with meat and vegetables, lowfat, thin crust*
58106910	Pizza with seafood, thin crust*
58106920	Pizza with seafood, thick crust*
58107220	White pizza, thin crust*
58107225	White pizza, regular crust*
58107230	White pizza, thick crust*
58108000	Calzone, with cheese, meatless*
58108010	Calzone, with meat and cheese*
58108050	Pizza rolls*
58116310	Cheese turnover, Puerto Rican style (Pastelillo de queso; Empanadilla)*
58117110	Cornmeal fritter, Puerto Rican style (Arepá; P.R. arepita)*
58121610	Dumpling, potato- or cheese-filled*
58122210	Gnocchi, cheese*
58122320	Knish, cheese (pastry filled with cheese)*
58124210	Pastry, cheese-filled*
58124250	Spanakopitta*
58125110	Quiche with meat, poultry or fish*
58125120	Spinach quiche, meatless*
58125180	Cheese quiche, meatless*
58126130	Turnover, meat- and cheese-filled, no gravy*
58126150	Turnover, meat- and cheese-filled, tomato-based sauce*
58126270	Turnover, chicken- or turkey-, and cheese-filled, no gravy*
58126290	Turnover, meat- and cheese-filled, lower in fat*
58126300	Turnover, meat- and cheese-filled, tomato-based sauce, lower in fat*
58126400	Turnover, filled with egg, meat and cheese*
58127150	Vegetables and cheese in pastry*
58127210	Croissant sandwich, filled with ham and cheese*
58127310	Croissant sandwich with ham, egg, and cheese*
58127330	Croissant sandwich with sausage, egg, and cheese*
58127350	Croissant sandwich with bacon, egg, and cheese*
58130011	Lasagna with meat*
58130013	Lasagna with meat, canned*
58130020	Lasagna with meat and spinach*
58130140	Lasagna with chicken or turkey*
58130150	Lasagna, with chicken or turkey, and spinach*
58130310	Lasagna, meatless*
58130320	Lasagna, meatless, with vegetables*
58131510	Ravioli, cheese-filled, no sauce*
58131520	Ravioli, cheese-filled, with tomato sauce*
58131523	Ravioli, cheese-filled, with tomato sauce, canned*
58131530	Ravioli, cheese-filled, with meat sauce*
58131535	Ravioli, cheese-filled, with cream sauce*
58131600	Ravioli, cheese and spinach-filled, with cream sauce*
58131610	Ravioli, cheese and spinach filled, with tomato sauce*
58132113	Pasta with tomato sauce and cheese, canned*
58133120	Manicotti, cheese-filled, with tomato sauce, meatless*
58133130	Manicotti, cheese-filled, with meat sauce*
58133140	Manicotti, vegetable- and cheese-filled, with tomato sauce, meatless*

58134110	Stuffed shells, cheese-filled, no sauce*
58134120	Stuffed shells, cheese-filled, with tomato sauce, meatless*
58134130	Stuffed shells, cheese-filled, with meat sauce*
58134160	Stuffed shells, cheese- and spinach- filled, no sauce*
58134620	Tortellini, cheese-filled, meatless, with tomato sauce*
58134623	Tortellini, cheese-filled, meatless, with tomato sauce, canned*
58134640	Tortellini, cheese-filled, meatless, with vinaigrette dressing*
58134660	Tortellini, cheese-filled, with cream sauce*
58134680	Tortellini, cheese-filled, no sauce*
58134810	Cannelloni, cheese- and spinach-filled, no sauce*
58145110	Macaroni or noodles with cheese*
58145113	Macaroni or noodles with cheese, canned*
58145114	Macaroni or noodles with cheese, made from dry mix*
58145115	Macaroni or noodles with cheese, from boxed mix with already prepared cheese sauce*
58145120	Macaroni or noodles with cheese and tuna*
58145130	Macaroni or noodles with cheese and beef*
58145140	Macaroni or noodles with cheese and tomato*
58145150	Macaroni or noodles with cheese and pork or ham*
58145160	Macaroni or noodles with cheese and frankfurters or hot dogs*
58145170	Macaroni and cheese with egg*
58145190	Macaroni or noodles with cheese and chicken or turkey*
58146120	Pasta with cheese and meat sauce*
58146150	Pasta with cheese and tomato sauce, meatless*
58147330	Macaroni, creamed, with cheese*
58148180	Macaroni or pasta salad with cheese*
58155610	Rice meal fritter, Puerto Rican style (Almojabana)*
58161110	Rice casserole with cheese*
58162090	Stuffed pepper, with meat*
58162110	Stuffed pepper, with rice and meat*
58162120	Stuffed pepper, with rice, meatless*
58163330	Flavored rice mixture with cheese*
58200100	Wrap sandwich, filled with meat, poultry, or fish, vegetables, and rice*
58200250	Wrap sandwich, filled with vegetables*
58200300	Wrap sandwich, filled with meat, poultry, or fish, vegetables, rice, and cheese*
58301020	Lasagna with cheese and sauce (diet frozen meal)*
58301030	Veal lasagna (diet frozen meal)*
58301050	Lasagna with cheese and meat sauce (diet frozen meal)*
58301110	Vegetable lasagna (frozen meal)*
58301150	Zucchini lasagna (diet frozen meal)*
58302000	Macaroni and cheese (diet frozen meal)*
58302050	Beef and noodles with meat sauce and cheese (diet frozen meal)*
58303100	Rice, with broccoli, cheese sauce (frozen side dish)*
58304010	Spaghetti and meatballs dinner, NFS (frozen meal)*
58304200	Ravioli, cheese-filled, with tomato sauce (diet frozen meal)*
58304220	Rigatoni with meat sauce and cheese (diet frozen meal)*
58304230	Ravioli, cheese-filled, with vegetable and fruit (frozen meal)*
58304250	Manicotti, cheese-filled, with tomato sauce (diet frozen meal)*
58305250	Pasta with vegetable and cheese sauce (diet frozen meal)*
58306010	Beef enchilada dinner, NFS (frozen meal)*
58306020	Beef enchilada, chili gravy, rice, refried beans (frozen meal)*
58306070	Cheese enchilada (frozen meal)*
58306100	Chicken enchilada (diet frozen meal)*
58421080	Sopa de tortilla, Mexican style tortilla soup*
71204000	Potato puffs, cheese-filled*
71301020	White potato, cooked, with cheese*
71301120	White potato, cooked, with ham and cheese*
71405100	White potato, hash brown, with cheese*
71410500	White potato skins, with adhering flesh, fried, with cheese*

71411000	White potato skins, with adhering flesh, fried, with cheese and bacon*
71501015	White potato, from fresh, mashed, made with milk, sour cream and/or cream cheese*
71501025	White potato, from fresh, mashed, made with milk, sour cream and/or cream cheese and fat*
71501050	White potato, from fresh, mashed, made with milk, fat and cheese*
71501055	White potato, from fresh, mashed, made with sour cream and/or cream cheese and fat*
71501070	White potato, from dry, mashed, made with milk, fat, egg and cheese*
71507000	White potato, stuffed, baked, peel not eaten, NS as to topping*
71507010	White potato, stuffed, baked, peel not eaten, stuffed with sour cream*
71507020	White potato, stuffed, baked, peel not eaten, stuffed with cheese*
71507040	White potato, stuffed, baked, peel not eaten, stuffed with broccoli and cheese sauce*
71507050	White potato, stuffed, baked, peel not eaten, stuffed with meat in cream sauce*
71508010	White potato, stuffed, baked, peel eaten, stuffed with sour cream*
71508020	White potato, stuffed, baked, peel eaten, stuffed with cheese*
71508040	White potato, stuffed, baked, peel eaten, stuffed with broccoli and cheese sauce*
71508060	White potato, stuffed, baked, peel eaten, stuffed with bacon and cheese*
71508070	White potato, stuffed, baked, peel not eaten, stuffed with bacon and cheese*
71801100	Potato and cheese soup*
72116140	Caesar salad (with romaine)*
72125260	Spinach and cheese casserole*
72202020	Broccoli casserole (broccoli, rice, cheese, and mushroom sauce)*
73305010	Squash, winter, baked with cheese*
75140500	Broccoli salad with cauliflower, cheese, bacon bits, and dressing*
75142500	Cucumber salad with creamy dressing*
75143200	Lettuce, salad with cheese, tomato and/or carrots, with or without other vegetables, no dressing*
75143350	Lettuce salad with egg, cheese, tomato, and/or carrots, with or without other vegetables, no dressing*
75146000	Greek Salad*
75400500	Artichokes, stuffed*
75414020	Mushrooms, stuffed*
75416600	Pea salad with cheese*
75418020	Squash, summer, casserole with tomato and cheese*
75601100	Beet soup (borscht)*
83100100	Salad dressing, NFS*
83112500	Creamy dressing, made with sour cream and/or buttermilk and oil*
83210000	Creamy dressing, made with sour cream and/or buttermilk and oil, diet, NS as to low or reduced calorie*
91501050	Gelatin dessert with cream cheese*
91501060	Gelatin dessert with sour cream*
91501070	Gelatin dessert with fruit and sour cream*
91501080	Gelatin dessert with fruit and cream cheese*

**Fruit and vegetable based products**

Food Code	Food Description
11115000	Buttermilk, fluid, nonfat
11115100	Buttermilk, fluid, 1% fat
11115200	Buttermilk, fluid, 2% fat
11120000	Milk, dry, reconstituted, NFS
11121100	Milk, dry, reconstituted, whole
11121210	Milk, dry, reconstituted, lowfat
11121300	Milk, dry, reconstituted, nonfat
11210000	Milk, evaporated, NS as to fat content and dilution
11210050	Milk, evaporated, NS as to fat content and dilution, used in coffee or tea (assume undiluted)
11210100	Milk, evaporated, NS as to fat content, undiluted
11211000	Milk, evaporated, whole, NS as to dilution
11211050	Milk, evaporated, whole, NS as to dilution, used in coffee or tea
11211400	Milk, evaporated, 2% fat, NS as to dilution
11212000	Milk, evaporated, skim, NS as to dilution
11212050	Milk, evaporated, skim, NS as to dilution, used in coffee or tea



11212100	Milk, evaporated, skim, undiluted
11220000	Milk, condensed, sweetened, NS as to dilution
11220100	Milk, condensed, sweetened, undiluted
11220200	Milk, condensed, sweetened, diluted
11320000	Milk, soy, ready-to-drink, not baby's
11320100	Milk, soy, light, ready-to-drink, not baby's
11320200	Milk, soy, nonfat, ready-to-drink, not baby's
11321000	Milk, soy, ready-to-drink, not baby's, chocolate
11321100	Milk, soy, light, ready-to-drink, not baby's, chocolate
11340000	Milk, imitation, fluid, non-soy, sweetened, flavors other than chocolate
11410000	Yogurt, NS as to type of milk or flavor
11411010	Yogurt, plain, NS as to type of milk
11411100	Yogurt, plain, whole milk
11411200	Yogurt, plain, lowfat milk
11411300	Yogurt, plain, nonfat milk
11420000	Yogurt, vanilla, lemon, or coffee flavor, NS as to type of milk
11421000	Yogurt, vanilla, lemon, or coffee flavor, whole milk
11422000	Yogurt, vanilla, lemon, maple, or coffee flavor, lowfat milk
11423000	Yogurt, vanilla, lemon, maple, or coffee flavor, nonfat milk
11424000	Yogurt, vanilla, lemon, maple, or coffee flavor, nonfat milk, sweetened with low calorie sweetener
11425000	Yogurt, chocolate, NS as to type of milk
11426000	Yogurt, chocolate, whole milk
11427000	Yogurt, chocolate, nonfat milk
11430000	Yogurt, fruit variety, NS as to type of milk
11431000	Yogurt, fruit variety, whole milk
11432000	Yogurt, fruit variety, lowfat milk
11432500	Yogurt, fruit variety, lowfat milk, sweetened with low-calorie sweetener
11433000	Yogurt, fruit variety, nonfat milk
11433500	Yogurt, fruit variety, nonfat milk, sweetened with low-calorie sweetener
11445000	Yogurt, fruit and nuts, lowfat milk
11446000	Fruit and lowfat yogurt parfait
11459990	Yogurt, frozen, NS as to flavor, NS as to type of milk
11460000	Yogurt, frozen, flavors other than chocolate, NS as to type of milk
11460100	Yogurt, frozen, chocolate, NS as to type of milk
11460150	Yogurt, frozen, NS as to flavor, lowfat milk
11460160	Yogurt, frozen, chocolate, lowfat milk
11460170	Yogurt, frozen, flavors other than chocolate, lowfat milk
11460200	Yogurt, frozen, chocolate, nonfat milk
11460250	Yogurt, frozen, flavors other than chocolate, with sorbet or sorbet-coated
11460300	Yogurt, frozen, flavors other than chocolate, nonfat milk
11460400	Yogurt, frozen, chocolate, nonfat milk, with low-calorie sweetener
11460410	Yogurt, frozen, flavors other than chocolate, nonfat milk, with low-calorie sweetener
11460440	Yogurt, frozen, flavors other than chocolate, whole milk
11461000	Yogurt, frozen, chocolate-coated
11461250	Yogurt, frozen, cone, chocolate
11461260	Yogurt, frozen, cone, flavors other than chocolate
11461270	Yogurt, frozen, cone, flavors other than chocolate, lowfat milk
11461280	Yogurt, frozen, cone, chocolate, lowfat milk
11511000	Milk, chocolate, NFS
11511100	Milk, chocolate, whole milk-based
11511200	Milk, chocolate, reduced fat milk-based, 2% (formerly "lowfat")
11511300	Milk, chocolate, skim milk-based
11511400	Milk, chocolate, lowfat milk-based
11512000	Cocoa, hot chocolate, not from dry mix, made with whole milk
11512500	Spanish-style hot chocolate drink, Puerto Rican style, made with milk
11512510	Hot chocolate, Puerto Rican style, made with low fat milk
11513000	Cocoa and sugar mixture, milk added, NS as to type of milk

11513100	Cocoa and sugar mixture, whole milk added
11513150	Cocoa and sugar mixture, reduced fat milk added
11513200	Cocoa and sugar mixture, lowfat milk added
11513300	Cocoa and sugar mixture, skim milk added
11513400	Chocolate syrup, milk added, NS as to type of milk
11513500	Chocolate syrup, whole milk added
11513550	Chocolate syrup, reduced fat milk added
11513600	Chocolate syrup, lowfat milk added
11513700	Chocolate syrup, skim milk added
11514100	Cocoa, sugar, and dry milk mixture, water added
11514300	Cocoa with nonfat dry milk and low calorie sweetener, mixture, water added
11514500	Cocoa, whey, and low calorie sweetener, mixture, fortified, water added
11516000	Cocoa, whey, and low-calorie sweetener mixture, lowfat milk added
11519000	Milk beverage, made with whole milk, flavors other than chocolate
11519040	Milk, flavors other than chocolate, NFS
11519050	Milk, flavors other than chocolate, whole milk-based
11519105	Milk, flavors other than chocolate, reduced fat milk-based
11519200	Milk, flavors other than chocolate, lowfat milk-based
11519205	Milk, flavors other than chocolate, skim-milk based
11520000	Milk, malted, unfortified, NS as to flavor, made with milk
11522000	Milk, malted, unfortified, natural flavor, made with milk
11525000	Milk, malted, fortified, natural flavor, made with milk
11526000	Milk, malted, fortified, chocolate, made with milk
11531000	Eggnog, made with whole milk
11531500	Eggnog, made with 2% reduced fat milk (formerly eggnog, made with "2% lowfat" milk)
11541000	Milk shake, NS as to flavor or type
11541100	Milk shake, homemade or fountain-type, NS as to flavor
11541110	Milk shake, homemade or fountain-type, chocolate
11541120	Milk shake, homemade or fountain-type, flavors other than chocolate
11541500	Milk shake, made with skim milk, chocolate
11541510	Milk shake, made with skim milk, flavors other than chocolate
11542100	Carry-out milk shake, chocolate
11542200	Carry-out milk shake, flavors other than chocolate
11551050	Milk fruit drink
11552200	Orange Julius
11553000	Fruit smoothie drink, made with fruit or fruit juice and dairy products
11553100	Fruit smoothie drink, NFS
11560000	Chocolate-flavored drink, whey- and milk-based
11560020	Flavored milk drink, whey- and milk-based, flavors other than chocolate
11611000	Instant breakfast, fluid, canned
11612000	Instant breakfast, powder, milk added
11613000	Instant breakfast, powder, sweetened with low calorie sweetener, milk added
11623000	Meal supplement or replacement, commercially prepared, ready-to-drink
11631000	High calorie beverage, canned or powdered, reconstituted
11641000	Meal supplement or replacement, milk-based, high protein, liquid
11641020	Meal replacement or supplement, milk based, ready-to-drink
11810000	Milk, dry, not reconstituted, NS as to whole, lowfat, or nonfat
11811000	Milk, dry, whole, not reconstituted
11812000	Milk, dry, lowfat, not reconstituted
11813000	Milk, dry, nonfat, not reconstituted
11825000	Whey, sweet, dry
11830100	Cocoa (or chocolate) with dry milk and sugar, dry mix, not reconstituted
11830110	Cocoa powder with nonfat dry milk and low calorie sweetener, dry mix, not reconstituted
11830120	Cocoa, whey, and low calorie sweetener, fortified, dry mix, not reconstituted
11830150	Cocoa powder, not reconstituted (no dry milk)
11830160	Cocoa (or chocolate) flavored beverage powder with sugar, dry mix, not reconstituted
11830170	Cocoa, whey, and low-calorie sweetener mixture, not reconstituted
11830200	Milk, malted, dry mix, unfortified, not reconstituted, flavors other than chocolate

11830210	Milk, malted, dry mix, fortified, not reconstituted, flavors other than chocolate
11830260	Milk, malted, dry mix, fortified, not reconstituted, chocolate
11830400	Milk beverage, powder, dry mix, not reconstituted, flavors other than chocolate
11830550	Milk beverage, powder, with nonfat dry milk and low calorie sweetener, dry mix, not reconstituted, flavors other than chocolate
11830800	Instant breakfast, powder, not reconstituted
11830810	Instant breakfast, powder, sweetened with low calorie sweetener, not reconstituted
11830900	Protein supplement, milk-based, powdered, not reconstituted
11830940	Meal replacement, high protein, milk based, fruit juice mixable formula, powdered, not reconstituted
11830970	Meal replacement, protein type, milk-based, powdered, not reconstituted
11830990	Nutrient supplement, milk-based, powdered, not reconstituted
11831500	Nutrient supplement, milk-based, high protein, powdered, not reconstituted
11832000	Meal replacement, protein type, milk- and soy-based, powdered, not reconstituted
11836000	Protein supplement, milk-based, Muscle Milk, powdered, not reconstituted
11836100	Protein supplement, milk-based, Muscle Milk Light, powdered, not reconstituted
12100100	Cream, NS as to light, heavy, or half and half
12110100	Cream, light, fluid
12110300	Cream, light, whipped, unsweetened
12120100	Cream, half and half
12120105	Cream, half and half, low fat
12120110	Cream, half and half, fat free
12130100	Cream, heavy, fluid
12130200	Cream, heavy, whipped, unsweetened
12140000	Cream, heavy, whipped, sweetened
12140100	Cream, whipped, pressurized container
12140105	Cream, whipped, pressurized container, light
12140110	Whipped topping, dairy based, fat free, pressurized container
12200100	Cream substitute, NS as to frozen, liquid, or powdered
12210100	Cream substitute, frozen
12210200	Cream substitute, liquid
12210210	Cream substitute, flavored, liquid
12210250	Cream substitute, light, liquid
12210255	Cream substitute, light, flavored, liquid
12210260	Cream substitute, fat free, liquid
12210270	Cream substitute, fat free, flavored, liquid
12210310	Cream substitute, sugar free, flavored, liquid
12210400	Cream substitute, powdered
12210410	Cream substitute, light, powdered
12210420	Cream substitute, flavored, powdered
12210430	Cream substitute, fat free, powder
12210440	Cream substitute, fat free, flavored, powder
12210500	Cream substitute, sugar free, powder
12210505	Cream substitute, sugar free, flavored, powder
12220000	Whipped topping, nondairy, NS as to canned, frozen, or made from powdered mix
12220100	Whipped topping, nondairy, pressurized can
12220200	Whipped topping, nondairy, frozen
12220250	Whipped topping, nondairy, frozen, lowfat
12220270	Whipped topping, non dairy, frozen, fat free
12220280	Whipped topping, nondairy, frozen, sugar free
12220300	Whipped cream substitute, nondairy, made from powdered mix
12220400	Whipped cream substitute, nondairy, lowfat, low sugar, made from powdered mix
12310100	Sour cream
12310300	Sour cream, reduced fat
12310350	Sour cream, light
12310370	Sour cream, fat free
12350000	Dip, sour cream base
12350020	Dip, sour cream base, reduced calorie

12350100	Spinach dip, sour cream base
13110000	Ice cream, NFS
13110100	Ice cream, regular, flavors other than chocolate
13110110	Ice cream, regular, chocolate
13110120	Ice cream, rich, flavors other than chocolate
13110130	Ice cream, rich, chocolate
13110200	Ice cream, soft serve, flavors other than chocolate
13110210	Ice cream, soft serve, chocolate
13110220	Ice cream, soft serve, NS as to flavor
13110320	Ice cream, no sugar added, flavors other than chocolate
13110330	Ice cream, no sugar added, chocolate
13120050	Ice cream bar or stick, not chocolate covered or cake covered
13120100	Ice cream bar or stick, chocolate covered
13120110	Ice cream bar or stick, chocolate or caramel covered, with nuts
13120120	Ice cream bar or stick, rich chocolate ice cream, thick chocolate covering
13120121	Ice cream bar or stick, rich ice cream, thick chocolate covering
13120130	Ice cream bar or stick, rich ice cream, chocolate covered, with nuts
13120140	Ice cream bar or stick, chocolate ice cream, chocolate covered
13120300	Ice cream bar, cake covered
13120400	Ice cream bar or stick with fruit
13120500	Ice cream sandwich
13120550	Ice cream cookie sandwich
13120700	Ice cream cone with nuts, flavors other than chocolate
13120710	Ice cream cone, chocolate covered, with nuts, flavors other than chocolate
13120720	Ice cream cone, chocolate covered or dipped, flavors other than chocolate
13120730	Ice cream cone, no topping, flavors other than chocolate
13120740	Ice cream cone, no topping, NS as to flavor
13120750	Ice cream cone with nuts, chocolate ice cream
13120760	Ice cream cone, chocolate covered or dipped, chocolate ice cream
13120770	Ice cream cone, no topping, chocolate ice cream
13120790	Ice cream sundae cone
13120800	Ice cream soda, flavors other than chocolate
13121000	Ice cream sundae, NS as to topping, with whipped cream
13121100	Ice cream sundae, fruit topping, with whipped cream
13121300	Ice cream sundae, chocolate or fudge topping, with whipped cream
13121400	Ice cream sundae, not fruit or chocolate topping, with whipped cream
13122100	Ice cream pie, no crust
13122500	Ice cream pie, with cookie crust, fudge topping, and whipped cream
13126000	Ice cream, fried
13130100	Light ice cream, NS as to flavor (formerly ice milk)
13130300	Light ice cream, flavors other than chocolate (formerly ice milk)
13130310	Light ice cream, chocolate (formerly ice milk)
13130320	Light ice cream, no sugar added, NS as to flavor
13130330	Light ice cream, no sugar added, flavors other than chocolate
13130340	Light ice cream, no sugar added, chocolate
13130590	Light ice cream, soft serve, NS as to flavor (formerly ice milk)
13130600	Light ice cream, soft serve, flavors other than chocolate (formerly ice milk)
13130610	Light ice cream, soft serve, chocolate (formerly ice milk)
13130620	Light ice cream, soft serve cone, flavors other than chocolate (formerly ice milk)
13130630	Light ice cream, soft serve cone, chocolate (formerly ice milk)
13130640	Light ice cream, soft serve cone, NS as to flavor (formerly ice milk)
13130700	Light ice cream, soft serve, blended with candy or cookies
13135000	Light ice cream, sandwich (formerly ice milk)
13135010	Ice cream sandwich, made with light chocolate ice cream
13136000	Ice cream sandwich, made with light, no sugar added ice cream
13140100	Light ice cream, bar or stick, chocolate-coated (formerly ice milk)
13140110	Light ice cream, bar or stick, chocolate covered, with nuts (formerly ice milk)
13140500	Light ice cream, cone, flavors other than chocolate (formerly ice milk)

13140550	Light ice cream, cone, chocolate (formerly ice milk)
13140650	Light ice cream, sundae, soft serve, not fruit or chocolate topping, with whipped cream (formerly ice milk)
13140660	Light ice cream, sundae, soft serve, chocolate or fudge topping (without whipped cream) (formerly ice milk)
13140670	Light ice cream, sundae, soft serve, fruit topping (without whipped cream) (formerly ice milk)
13140680	Light ice cream, sundae, soft serve, not fruit or chocolate topping (without whipped cream) (formerly ice milk)
13140700	Light ice cream, creamsicle or dreamsicle (formerly ice milk)
13140900	Light ice cream, fudgesicle (formerly ice milk)
13142000	Milk dessert bar or stick, frozen, with coconut
13150000	Sherbet, all flavors
13160150	Fat free ice cream, no sugar added, chocolate
13160160	Fat free ice cream, no sugar added, flavors other than chocolate
13160400	Fat free ice cream, flavors other than chocolate
13160410	Fat free ice cream, chocolate
13161000	Milk dessert bar, frozen, made from lowfat milk
13161500	Milk dessert sandwich bar, frozen, made from lowfat milk
13161520	Milk dessert sandwich bar, frozen, with low-calorie sweetener, made from lowfat milk
13161600	Milk dessert bar, frozen, made from lowfat milk and low calorie sweetener
13161630	Light ice cream, bar or stick, with low-calorie sweetener, chocolate-coated (formerly ice milk)
13200110	Pudding, NFS
13210110	Pudding, bread
13210180	Pudding, Mexican bread (Capirotada)
13210220	Pudding, chocolate, ready-to-eat, NS as to from dry mix or canned
13210250	Pudding, chocolate, ready-to-eat, low calorie, containing artificial sweetener, NS as to from dry mix or canned
13210270	Custard, Puerto Rican style (Maicena, Natilla)
13210280	Pudding, flavors other than chocolate, ready-to-eat, NS as to from dry mix or canned
13210290	Pudding, flavors other than chocolate, ready-to-eat, low calorie, containing artificial sweetener, NS as to from dry mix or canned
13210300	Custard
13210350	Custard, Puerto Rican style (Flan)
13210410	Pudding, rice
13210450	Pudding, rice flour, with nuts (Indian dessert)
13210500	Pudding, tapioca, made from home recipe, made with milk
13210520	Pudding, tapioca, made from dry mix, made with milk
13210750	Pudding, pumpkin
13220110	Pudding, flavors other than chocolate, prepared from dry mix, milk added
13220120	Pudding, chocolate, prepared from dry mix, milk added
13220210	Pudding, flavors other than chocolate, prepared from dry mix, low calorie, containing artificial sweetener, milk added
13220220	Pudding, chocolate, prepared from dry mix, low calorie, containing artificial sweetener, milk added
13220230	Pudding, canned, chocolate, reduced fat
13220235	Pudding, canned, chocolate, fat free
13220240	Pudding, canned, flavors other than chocolate, reduced fat
13220245	Pudding, canned, flavors other than chocolate, fat free
13230110	Pudding, canned, flavors other than chocolate
13230120	Pudding, canned, low calorie, containing artificial sweetener, flavors other than chocolate
13230130	Pudding, canned, chocolate
13230140	Pudding, canned, low calorie, containing artificial sweetener, chocolate
13230200	Pudding, canned, chocolate and non-chocolate flavors combined
13230500	Pudding, canned, tapioca
13230510	Pudding, canned, tapioca, fat free
13241000	Pudding, with fruit and vanilla wafers
13250000	Mousse, chocolate
13250100	Mousse, not chocolate

13252200	Milk dessert or milk candy, Puerto Rican style (Dulce de leche)
13252500	Barfi or Burfi, Indian dessert, made from milk and/or cream and/or Ricotta cheese
13252600	Tiramisu
13411000	White sauce, milk sauce
13412000	Milk gravy, quick gravy
14010000	Cheese, NFS
14010100	Cheese, Cheddar or American type, NS as to natural or processed
14100100	Cheese, natural, NFS
14101010	Cheese, Blue or Roquefort
14102010	Cheese, Brick
14103010	Cheese, Camembert
14103020	Cheese, Brie
14104010	Cheese, natural, Cheddar or American type
14104015	Cheese, natural, Cheddar or American type, reduced fat
14104020	Cheese, Cheddar or American type, dry, grated
14104200	Cheese, Colby
14104250	Cheese, Colby Jack
14104400	Cheese, Feta
14104600	Cheese, Fontina
14104700	Cheese, goat
14105010	Cheese, Gouda or Edam
14105200	Cheese, Gruyere
14106200	Cheese, Monterey
14106500	Cheese, Monterey, lowfat
14107010	Cheese, Mozzarella, NFS
14107020	Cheese, Mozzarella, whole milk
14107030	Cheese, Mozzarella, part skim
14107040	Cheese, Mozzarella, low sodium
14107060	Cheese, Mozzarella, nonfat or fat free
14107200	Cheese, Muenster
14107250	Cheese, Muenster, lowfat
14108010	Cheese, Parmesan, dry grated
14108015	Cheese, Parmesan, dry grated, reduced fat
14108020	Cheese, Parmesan, hard
14108060	Parmesan cheese topping, fat free
14108200	Cheese, Port du Salut
14108400	Cheese, Provolone
14108420	Cheese, provolone, reduced fat
14109010	Cheese, Swiss
14109020	Cheese, Swiss, low sodium
14109030	Cheese, Swiss, lowfat
14110010	Cheese, Cheddar or Colby, low sodium
14110030	Cheese, Cheddar or Colby, lowfat
14120010	Cheese, Mexican blend
14120020	Cheese, Mexican blend, reduced fat
14131000	Queso Anejo (aged Mexican cheese)
14131500	Queso Asadero
14132000	Queso Chihuahua
14133000	Queso Fresco
14200100	Cheese, cottage, NFS
14201010	Cheese, cottage, creamed, large or small curd
14201500	Cheese, Ricotta
14202010	Cheese, cottage, with fruit
14202020	Cheese, cottage, with vegetables
14203010	Cheese, cottage, dry curd
14203020	Cheese, cottage, salted, dry curd
14203510	Puerto Rican white cheese (queso del pais, blanco)
14204010	Cheese, cottage, lowfat (1-2% fat)

14204020	Cheese, cottage, lowfat, with fruit
14301010	Cheese, cream
14303010	Cheese, cream, light or lite (formerly called Cream Cheese Lowfat)
14410100	Cheese, processed, American and Swiss blends
14410200	Cheese, processed, American or Cheddar type
14410210	Cheese, processed, American or Cheddar type, low sodium
14410300	Cheese, processed, American or Cheddar type, lowfat
14410330	Cheese, processed cheese product, American or Cheddar type, reduced fat
14410350	Cheese, processed, American or Cheddar type, nonfat or fat free
14410380	Cheese, processed cream cheese product, nonfat or fat free
14410400	Cheese, processed, Swiss
14410420	Cheese, processed, Swiss, lowfat
14410500	Cheese, processed cheese food
14410600	Cheese, processed, with vegetables
14410620	Cheese, processed, with wine
14420000	Cheese spread, NFS
14420100	Cheese spread, American or Cheddar cheese base
14420160	Cheese spread, Swiss cheese base
14420200	Cheese spread, cream cheese, regular
14420210	Cheese spread, cream cheese, light or lite
14420300	Cheese spread, pressurized can
14502010	Imitation cheese, American or cheddar type
14502040	Imitation cheese, American or cheddar type, low cholesterol
14610200	Cheese, cottage cheese, with gelatin dessert
14610210	Cheese, cottage cheese, with gelatin dessert and fruit
14610250	Cheese, cottage cheese, with gelatin dessert and vegetables
14610520	Cheese with nuts
14620100	Dip, cream cheese base
14620120	Shrimp dip, cream cheese base
14620150	Dip, cheese with chili pepper (chili con queso)
14620200	Dip, cheese base other than cream cheese
14620300	Topping from cheese pizza*
14620310	Topping from vegetable pizza*
14620320	Topping from meat pizza*
14620330	Topping from meat and vegetable pizza*
14630100	Cheese fondue
14630200	Cheese souffle
14630300	Welsh rarebit
14640100	Cheese sandwich, grilled*
14650100	Cheese sauce
14650160	Alfredo sauce
14660200	Cheese, nuggets or pieces, breaded, baked, or fried
14710100	Cheddar cheese soup
14710200	Beer soup, made with milk
24198710	Chicken patty with cheese, breaded, cooked
25220150	Beef sausage with cheese, smoked*
25220360	Bratwurst, with cheese*
27111430	Chili con carne, NS as to beans, with cheese*
27111440	Chili con carne with beans and cheese*
27113100	Beef stroganoff*
27135110	Veal parmigiana*
27146250	Chicken or turkey cordon bleu*
27146300	Chicken or turkey parmigiana*
27212350	Beef stroganoff with noodles*
27242350	Chicken or turkey tetrazzini*
27443150	Chicken or turkey divan*
27446320	Chicken or turkey (breaded, fried) garden salad with bacon (chicken and/or turkey, bacon, cheese, lettuce and/or greens, tomato and/or carrots, other vegetables), no dressing*

27446360	Chicken or turkey caesar garden salad (chicken and/or turkey, lettuce, tomato, cheese), no dressing*
27446400	Chicken or turkey and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), cheese sauce (mixture)*
27450090	Tuna salad with cheese*
27460490	Julienne salad (meat, cheese, eggs, vegetables), no dressing*
27460510	Antipasto with ham, fish, cheese, vegetables*
27500200	Wrap sandwich, filled with meat, poultry, or fish, vegetables, and cheese*
27500300	Wrap sandwich, filled with meat, poultry, or fish, and vegetables*
27510210	Cheeseburger, plain, on bun*
27510220	Cheeseburger, with mayonnaise or salad dressing, on bun*
27510230	Cheeseburger, with mayonnaise or salad dressing and tomatoes, on bun*
27510240	Cheeseburger, 1/4 lb meat, plain, on bun*
27510250	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing, on bun*
27510260	Cheeseburger, 1/4 lb meat, with mushrooms in sauce, on bun*
27510280	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on bun*
27510290	Double cheeseburger (2 patties), plain, on double-decker bun*
27510300	Double cheeseburger (2 patties), with mayonnaise or salad dressing, on double-decker bun*
27510310	Cheeseburger with tomato and/or catsup, on bun*
27510311	Cheeseburger, 1 oz meat, plain, on miniature bun*
27510320	Cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510330	Double cheeseburger (2 patties), with tomato and/or catsup, on bun*
27510340	Double cheeseburger (2 patties), with mayonnaise or salad dressing and tomatoes, on bun*
27510350	Cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510360	Cheeseburger with mayonnaise or salad dressing, tomato and bacon, on bun*
27510370	Double cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510375	Double cheeseburger (2 patties, 1/4 lb meat each), with tomato and/or catsup, on bun*
27510380	Triple cheeseburger (3 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510390	Double bacon cheeseburger (2 patties, 1/4 lb meat each), on bun*
27510400	Bacon cheeseburger, 1/4 lb meat, with tomato and/or catsup, on bun*
27510420	Taco burger, on bun*
27510425	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing, on bun*
27510430	Double bacon cheeseburger (2 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun*
27510440	Bacon cheeseburger, 1/4 lb meat, with mayonnaise or salad dressing and tomatoes, on bun*
27510450	Cheeseburger, 1/4 lb meat, with ham, on bun*
27510700	Meatball and spaghetti sauce submarine sandwich*
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread*
27513050	Roast beef sandwich with cheese*
27515020	Steak and cheese submarine sandwich, with lettuce and tomato*
27515040	Steak and cheese submarine sandwich, plain, on roll*
27515070	Steak and cheese submarine sandwich, with fried peppers and onions, on roll*
27520135	Bacon, chicken, and tomato club sandwich, with cheese, lettuce and spread*
27520165	Bacon, chicken fillet (breaded, fried), and tomato club with lettuce and spread*
27520166	Bacon, chicken fillet (breaded, fried), and tomato club sandwich with cheese, lettuce and spread*
27520320	Ham and cheese sandwich, with lettuce and spread*
27520350	Ham and cheese sandwich, with spread, grilled*
27520360	Ham and cheese sandwich, on bun, with lettuce and spread*
27520370	Hot ham and cheese sandwich, on bun*
27520390	Ham and cheese submarine sandwich, on multigrain roll, with lettuce, tomato and spread*
27540200	Fajita-style chicken sandwich with cheese, on pita bread, with lettuce and tomato*
27540210	Wrap sandwich filled with chicken strips (breaded, fried), cheese, lettuce, and spread*
27540230	Chicken patty sandwich with cheese, on wheat bun, with lettuce, tomato and spread*
27540250	Chicken fillet, broiled, sandwich with cheese, on whole wheat roll, with lettuce, tomato and non-mayonaise type spread*



27540280	Chicken fillet, broiled, sandwich with cheese, on bun, with lettuce, tomato and spread*
27540300	Wrap sandwich filled with chicken strips (broiled), cheese, lettuce, and spread*
27540350	Turkey submarine sandwich, with cheese, lettuce, tomato and spread*
27550100	Fish sandwich, on bun, with cheese and spread*
27560330	Frankfurter or hot dog, with cheese, plain, on bun*
27560370	Frankfurter or hot dog with chili and cheese, on bun*
27560670	Sausage and cheese on English muffin*
27560705	Sausage balls (made with biscuit mix and cheese)*
27560910	Submarine, cold cut sandwich, with lettuce and tomato*
28110370	Salisbury steak with gravy, macaroni and cheese, vegetable (frozen meal)*
28110380	Salisbury steak with gravy, macaroni and cheese (frozen meal)*
28110660	Meatballs, Swedish, in gravy, with noodles (diet frozen meal)*
28113110	Salisbury steak, baked, with tomato sauce, vegetable (diet frozen meal)*
28133110	Veal, breaded, with spaghetti, in tomato sauce (frozen meal)*
28140150	Chicken divan (frozen meal)*
28140730	Chicken patty, breaded, with tomato sauce and cheese, fettuccine alfredo, vegetable (frozen meal)*
28141050	Chicken patty parmigiana, breaded, with vegetable (diet frozen meal)*
28141650	Chicken and vegetables au gratin with rice-vegetable mixture (diet frozen entree)*
28143080	Chicken with noodles and cheese sauce (diet frozen meal)*
28143150	Chicken and vegetable entree with noodles (diet frozen meal)*
28143170	Chicken in cream sauce with noodles and vegetable (frozen meal)*
28143220	Chicken in barbecue sauce, with rice, vegetable and dessert, reduced fat and sodium (diet frozen meal)*
28144100	Chicken and vegetable entree with noodles and cream sauce (frozen meal)*
28145710	Turkey tetrazzini (frozen meal)*
28150210	Haddock with chopped spinach (diet frozen meal)*
28150220	Flounder with chopped broccoli (diet frozen meal)*
32105010	Egg omelet or scrambled egg, with cheese*
32105055	Egg omelet or scrambled egg, with cheese and vegetables other than dark-green*
32105080	Egg omelet or scrambled egg, with cheese and ham or bacon*
32105085	Egg omelet or scrambled egg, with cheese, ham or bacon, and tomatoes*
32105121	Egg omelet or scrambled egg, with sausage and cheese*
32105190	Egg casserole with bread, cheese, milk and meat*
32202010	Egg, cheese, and ham on English muffin*
32202020	Egg, cheese, and ham on biscuit*
32202025	Egg, cheese and ham on bagel*
32202030	Egg, cheese, and sausage on English muffin*
32202035	Egg, cheese, and sausage on bun*
32202040	Egg, cheese, and beef on English Muffin*
32202045	Egg, cheese, and steak on bagel*
32202050	Egg, cheese, and sausage on biscuit*
32202055	Egg, cheese, and sausage griddle cake sandwich*
32202070	Egg, cheese, and bacon on biscuit*
32202075	Egg, cheese, and bacon griddle cake sandwich*
32202080	Egg, cheese, and bacon on English muffin*
32202085	Egg, cheese and bacon on bagel*
32202120	Egg, cheese and sausage on bagel*
32202200	Egg and cheese on biscuit*
33201110	Scrambled egg, made from cholesterol-free frozen mixture with cheese*
41205020	Refried beans with cheese*
41812850	Vegetarian stroganoff (made with meat substitute)*
56201060	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, NS as to fat added in cooking*
56201061	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, fat not added in cooking*
56201062	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, fat added in cooking*

56201070	Grits, cooked, corn or hominy, with cheese, regular, NS as to fat added in cooking*
56201071	Grits, cooked, corn or hominy, with cheese, regular, fat not added in cooking*
56201072	Grits, cooked, corn or hominy, with cheese, regular, fat added in cooking*
56201082	Grits, cooked, corn or hominy, with cheese, quick, fat added in cooking*
56201091	Grits, cooked, corn or hominy, with cheese, instant, fat not added in cooking*
56201092	Grits, cooked, corn or hominy, with cheese, instant, fat added in cooking*
58100120	Burrito with beef, beans, and cheese*
58100130	Burrito with beef and cheese, no beans*
58100140	Burrito with beef, beans, cheese, and sour cream*
58100155	Burrito with beef, rice, and cheese*
58100160	Burrito with beef, beans, rice, and cheese*
58100220	Burrito with chicken, beans, and cheese*
58100230	Burrito with chicken and cheese*
58100245	Burrito with chicken, beans, cheese, and sour cream*
58100250	Burrito with chicken, rice, and cheese*
58100255	Burrito with chicken, beans, rice, and cheese*
58100320	Burrito with beans and cheese, meatless*
58100330	Burrito with rice, beans, cheese, sour cream, lettuce, tomato and guacamole, meatless*
58100340	Burrito with eggs, sausage, cheese and vegetables*
58100350	Burrito with eggs and cheese, no beans*
58100360	Chilaquiles, tortilla casserole with salsa, cheese, and egg*
58100370	Chilaquiles, tortilla casserole with salsa and cheese, no egg*
58100410	Burrito with beef, cheese, and sour cream*
58100520	Enchilada with beef, beans, and cheese*
58100530	Enchilada with beef and cheese, no beans*
58100560	Enchilada with ham and cheese, no beans*
58100620	Enchilada with chicken, beans, and cheese, tomato- based sauce*
58100630	Enchilada with chicken and cheese, no beans, tomato- based sauce*
58100720	Enchilada with beans and cheese, meatless*
58100800	Enchilada with cheese, meatless, no beans*
58101300	Taco or tostada with beef, cheese and lettuce*
58101320	Taco or tostada with beef, cheese, lettuce, tomato and salsa*
58101350	Soft taco with beef, cheese, lettuce, tomato and sour cream*
58101400	Soft taco with beef, cheese, and lettuce*
58101450	Soft taco with chicken, cheese, and lettuce*
58101460	Soft taco with chicken, cheese, lettuce, tomato and sour cream*
58101520	Taco or tostada with chicken, cheese, lettuce, tomato and salsa*
58101530	Soft taco with beef, cheese, lettuce, tomato and salsa*
58101720	Taco or tostada with beans and cheese, meatless, with lettuce, tomato and salsa*
58101730	Taco or tostada with beans, cheese, meat, lettuce, tomato and salsa*
58101820	Mexican casserole made with ground beef, beans, tomato sauce, cheese, taco seasonings, and corn chips*
58101830	Mexican casserole made with ground beef, tomato sauce, cheese, taco seasonings, and corn chips*
58101910	Taco or tostada salad with beef and cheese, corn chips*
58101930	Taco or tostada salad with beef, beans and cheese, fried flour tortilla*
58101940	Taco or tostada salad, meatless, with cheese, fried flour tortilla*
58104080	Nachos with beef, beans, cheese, and sour cream*
58104090	Nachos with cheese and sour cream*
58104100	Nachos with cheese, meatless, no beans*
58104120	Nachos with beans and cheese*
58104130	Nachos with beef, beans, and cheese*
58104140	Nachos with beef and cheese*
58104180	Nachos with beef, beans, cheese, tomatoes, sour cream and onions*
58104250	Nachos with chicken or turkey and cheese*
58104260	Chalupa with beans, cheese, lettuce and tomato*
58104280	Chalupa with beef, cheese, lettuce, tomato and sour cream*
58104290	Chalupa with beef, cheese, lettuce, tomato and salsa*

58104310	Chalupa with beans, chicken, cheese, lettuce and tomato*
58104320	Chalupa with chicken, cheese, lettuce, tomato and sour cream*
58104340	Chalupa with chicken, cheese, lettuce, tomato and salsa*
58104510	Chimichanga with beef, cheese, lettuce and tomato*
58104520	Chimichanga with beans and cheese, meatless, with lettuce and tomato*
58104530	Chimichanga with chicken and cheese*
58104550	Chimichanga with chicken, sour cream, lettuce and tomato, no cheese*
58104710	Quesadilla with cheese, meatless*
58104730	Quesadilla with meat and cheese*
58104740	Quesadilla with poultry and cheese*
58105100	Pupusa, cheese-filled*
58105110	Pupusa, meat-filled*
58106200	Pizza, cheese, prepared from frozen, thin crust*
58106205	Pizza, cheese, prepared from frozen, thick crust*
58106210	Pizza, cheese, NS as to type of crust*
58106220	Pizza, cheese, thin crust*
58106225	Pizza, cheese, regular crust*
58106230	Pizza, cheese, thick crust*
58106240	Pizza, extra cheese, NS as to type of crust*
58106250	Pizza, extra cheese, thin crust*
58106260	Pizza, extra cheese, thick crust*
58106300	Pizza, cheese, with vegetables, prepared from frozen, thin crust*
58106305	Pizza, cheese with vegetables, prepared from frozen, thick crust*
58106310	Pizza, cheese, with vegetables, NS as to type of crust*
58106320	Pizza, cheese, with vegetables, thin crust*
58106325	Pizza, cheese, with vegetables, regular crust*
58106330	Pizza, cheese, with vegetables, thick crust*
58106345	Pizza with cheese and extra vegetables, thin crust*
58106350	Pizza with cheese and extra vegetables, thick crust*
58106360	Pizza, cheese, with fruit, thick crust*
58106510	Pizza with meat, NS as to type of crust*
58106520	Pizza with meat, thin crust*
58106530	Pizza with meat, thick crust*
58106780	Pizza with meat and vegetables, lowfat, thin crust*
58106910	Pizza with seafood, thin crust*
58106920	Pizza with seafood, thick crust*
58107220	White pizza, thin crust*
58107225	White pizza, regular crust*
58107230	White pizza, thick crust*
58108000	Calzone, with cheese, meatless*
58108010	Calzone, with meat and cheese*
58108050	Pizza rolls*
58116310	Cheese turnover, Puerto Rican style (Pastelillo de queso; Empanadilla)*
58117110	Cornmeal fritter, Puerto Rican style (Arepá; P.R. arepita)*
58121610	Dumpling, potato- or cheese-filled*
58122210	Gnocchi, cheese*
58122320	Knish, cheese (pastry filled with cheese)*
58124210	Pastry, cheese-filled*
58124250	Spanakopitta*
58125110	Quiche with meat, poultry or fish*
58125120	Spinach quiche, meatless*
58125180	Cheese quiche, meatless*
58126130	Turnover, meat- and cheese-filled, no gravy*
58126150	Turnover, meat- and cheese-filled, tomato-based sauce*
58126270	Turnover, chicken- or turkey-, and cheese-filled, no gravy*
58126290	Turnover, meat- and cheese-filled, lower in fat*
58126300	Turnover, meat- and cheese-filled, tomato-based sauce, lower in fat*
58126400	Turnover, filled with egg, meat and cheese*

58127150	Vegetables and cheese in pastry*
58127210	Croissant sandwich, filled with ham and cheese*
58127310	Croissant sandwich with ham, egg, and cheese*
58127330	Croissant sandwich with sausage, egg, and cheese*
58127350	Croissant sandwich with bacon, egg, and cheese*
58130011	Lasagna with meat*
58130013	Lasagna with meat, canned*
58130020	Lasagna with meat and spinach*
58130140	Lasagna with chicken or turkey*
58130150	Lasagna, with chicken or turkey, and spinach*
58130310	Lasagna, meatless*
58130320	Lasagna, meatless, with vegetables*
58131510	Ravioli, cheese-filled, no sauce*
58131520	Ravioli, cheese-filled, with tomato sauce*
58131523	Ravioli, cheese-filled, with tomato sauce, canned*
58131530	Ravioli, cheese-filled, with meat sauce*
58131535	Ravioli, cheese-filled, with cream sauce*
58131600	Ravioli, cheese and spinach-filled, with cream sauce*
58131610	Ravioli, cheese and spinach filled, with tomato sauce*
58132113	Pasta with tomato sauce and cheese, canned*
58133120	Manicotti, cheese-filled, with tomato sauce, meatless*
58133130	Manicotti, cheese-filled, with meat sauce*
58133140	Manicotti, vegetable- and cheese-filled, with tomato sauce, meatless*
58134110	Stuffed shells, cheese-filled, no sauce*
58134120	Stuffed shells, cheese-filled, with tomato sauce, meatless*
58134130	Stuffed shells, cheese-filled, with meat sauce*
58134160	Stuffed shells, cheese- and spinach- filled, no sauce*
58134620	Tortellini, cheese-filled, meatless, with tomato sauce*
58134623	Tortellini, cheese-filled, meatless, with tomato sauce, canned*
58134640	Tortellini, cheese-filled, meatless, with vinaigrette dressing*
58134660	Tortellini, cheese-filled, with cream sauce*
58134680	Tortellini, cheese-filled, no sauce*
58134810	Cannelloni, cheese- and spinach-filled, no sauce*
58145110	Macaroni or noodles with cheese*
58145113	Macaroni or noodles with cheese, canned*
58145114	Macaroni or noodles with cheese, made from dry mix*
58145115	Macaroni or noodles with cheese, from boxed mix with already prepared cheese sauce*
58145120	Macaroni or noodles with cheese and tuna*
58145130	Macaroni or noodles with cheese and beef*
58145140	Macaroni or noodles with cheese and tomato*
58145150	Macaroni or noodles with cheese and pork or ham*
58145160	Macaroni or noodles with cheese and frankfurters or hot dogs*
58145170	Macaroni and cheese with egg*
58145190	Macaroni or noodles with cheese and chicken or turkey*
58146120	Pasta with cheese and meat sauce*
58146150	Pasta with cheese and tomato sauce, meatless*
58147330	Macaroni, creamed, with cheese*
58148180	Macaroni or pasta salad with cheese*
58155610	Rice meal fritter, Puerto Rican style (Almojabana)*
58161110	Rice casserole with cheese*
58162090	Stuffed pepper, with meat*
58162110	Stuffed pepper, with rice and meat*
58162120	Stuffed pepper, with rice, meatless*
58163330	Flavored rice mixture with cheese*
58200100	Wrap sandwich, filled with meat, poultry, or fish, vegetables, and rice*
58200250	Wrap sandwich, filled with vegetables*
58200300	Wrap sandwich, filled with meat, poultry, or fish, vegetables, rice, and cheese*
58301020	Lasagna with cheese and sauce (diet frozen meal)*

58301030	Veal lasagna (diet frozen meal)*
58301050	Lasagna with cheese and meat sauce (diet frozen meal)*
58301110	Vegetable lasagna (frozen meal)*
58301150	Zucchini lasagna (diet frozen meal)*
58302000	Macaroni and cheese (diet frozen meal)*
58302050	Beef and noodles with meat sauce and cheese (diet frozen meal)*
58303100	Rice, with broccoli, cheese sauce (frozen side dish)*
58304010	Spaghetti and meatballs dinner, NFS (frozen meal)*
58304200	Ravioli, cheese-filled, with tomato sauce (diet frozen meal)*
58304220	Rigatoni with meat sauce and cheese (diet frozen meal)*
58304230	Ravioli, cheese-filled, with vegetable and fruit (frozen meal)*
58304250	Manicotti, cheese-filled, with tomato sauce (diet frozen meal)*
58305250	Pasta with vegetable and cheese sauce (diet frozen meal)*
58306010	Beef enchilada dinner, NFS (frozen meal)*
58306020	Beef enchilada, chili gravy, rice, refried beans (frozen meal)*
58306070	Cheese enchilada (frozen meal)*
58306100	Chicken enchilada (diet frozen meal)*
58421080	Sopa de tortilla, Mexican style tortilla soup*
71204000	Potato puffs, cheese-filled*
71301020	White potato, cooked, with cheese*
71301120	White potato, cooked, with ham and cheese*
71405100	White potato, hash brown, with cheese*
71410500	White potato skins, with adhering flesh, fried, with cheese*
71411000	White potato skins, with adhering flesh, fried, with cheese and bacon*
71501015	White potato, from fresh, mashed, made with milk, sour cream and/or cream cheese*
71501025	White potato, from fresh, mashed, made with milk, sour cream and/or cream cheese and fat*
71501050	White potato, from fresh, mashed, made with milk, fat and cheese*
71501055	White potato, from fresh, mashed, made with sour cream and/or cream cheese and fat*
71501070	White potato, from dry, mashed, made with milk, fat, egg and cheese*
71507000	White potato, stuffed, baked, peel not eaten, NS as to topping*
71507010	White potato, stuffed, baked, peel not eaten, stuffed with sour cream*
71507020	White potato, stuffed, baked, peel not eaten, stuffed with cheese*
71507040	White potato, stuffed, baked, peel not eaten, stuffed with broccoli and cheese sauce*
71507050	White potato, stuffed, baked, peel not eaten, stuffed with meat in cream sauce*
71508010	White potato, stuffed, baked, peel eaten, stuffed with sour cream*
71508020	White potato, stuffed, baked, peel eaten, stuffed with cheese*
71508040	White potato, stuffed, baked, peel eaten, stuffed with broccoli and cheese sauce*
71508060	White potato, stuffed, baked, peel eaten, stuffed with bacon and cheese*
71508070	White potato, stuffed, baked, peel not eaten, stuffed with bacon and cheese*
71801100	Potato and cheese soup*
72116140	Caesar salad (with romaine)*
72125260	Spinach and cheese casserole*
72202020	Broccoli casserole (broccoli, rice, cheese, and mushroom sauce)*
73305010	Squash, winter, baked with cheese*
75140500	Broccoli salad with cauliflower, cheese, bacon bits, and dressing*
75142500	Cucumber salad with creamy dressing*
75143200	Lettuce, salad with cheese, tomato and/or carrots, with or without other vegetables, no dressing*
75143350	Lettuce salad with egg, cheese, tomato, and/or carrots, with or without other vegetables, no dressing*
75146000	Greek Salad*
75400500	Artichokes, stuffed*
75414020	Mushrooms, stuffed*
75416600	Pea salad with cheese*
75418020	Squash, summer, casserole with tomato and cheese*
75601100	Beet soup (borscht)*
83100100	Salad dressing, NFS*
83112500	Creamy dressing, made with sour cream and/or buttermilk and oil*

83210000	Creamy dressing, made with sour cream and/or buttermilk and oil, diet, NS as to low or reduced calorie*
91501050	Gelatin dessert with cream cheese*
91501060	Gelatin dessert with sour cream*
91501070	Gelatin dessert with fruit and sour cream*
91501080	Gelatin dessert with fruit and cream cheese*

**Pizza product**

Food Code	Food Description
14620300	Topping from cheese pizza
14620310	Topping from vegetable pizza
58106200	Pizza, cheese, prepared from frozen, thin crust
58106205	Pizza, cheese, prepared from frozen, thick crust
58106210	Pizza, cheese, NS as to type of crust
58106220	Pizza, cheese, thin crust
58106225	Pizza, cheese, regular crust
58106230	Pizza, cheese, thick crust
58106240	Pizza, extra cheese, NS as to type of crust
58106250	Pizza, extra cheese, thin crust
58106260	Pizza, extra cheese, thick crust
58106300	Pizza, cheese, with vegetables, prepared from frozen, thin crust
58106305	Pizza, cheese with vegetables, prepared from frozen, thick crust
58106310	Pizza, cheese, with vegetables, NS as to type of crust
58106320	Pizza, cheese, with vegetables, thin crust
58106325	Pizza, cheese, with vegetables, regular crust
58106330	Pizza, cheese, with vegetables, thick crust
58106345	Pizza with cheese and extra vegetables, thin crust
58106350	Pizza with cheese and extra vegetables, thick crust
58106360	Pizza, cheese, with fruit, thick crust
58106500	Pizza with meat, prepared from frozen, thin crust
58106505	Pizza with meat, prepared from frozen, thick crust
58106510	Pizza with meat, NS as to type of crust
58106520	Pizza with meat, thin crust
58106530	Pizza with meat, thick crust
58106540	Pizza with pepperoni, NS as to type of crust
58106550	Pizza with pepperoni, thin crust
58106555	Pizza with pepperoni, regular crust
58106560	Pizza with pepperoni, thick crust
58106610	Pizza with meat other than pepperoni, NS as to type of crust
58106620	Pizza with meat other than pepperoni, thin crust
58106625	Pizza with meat other than pepperoni, regular crust
58106630	Pizza with meat other than pepperoni, thick crust
58106640	Pizza with extra meat, NS as to type of crust
58106650	Pizza with extra meat, thin crust
58106655	Pizza with extra meat, regular crust
58106660	Pizza with extra meat, thick crust
58106700	Pizza with meat and vegetables, prepared from frozen, thin crust
58106705	Pizza with meat and vegetables, prepared from frozen, thick crust
58106710	Pizza with meat and vegetables, NS as to type of crust
58106720	Pizza with meat and vegetables, thin crust
58106725	Pizza with meat and vegetables, regular crust
58106730	Pizza with meat and vegetables, thick crust
58106735	Pizza with extra meat and extra vegetables, NS as to type of crust
58106736	Pizza with extra meat and extra vegetables, thin crust
58106737	Pizza with extra meat and extra vegetables, thick crust
58106738	Pizza with extra meat and extra vegetables, regular crust
58106740	Pizza with meat and fruit, NS as to type of crust
58106750	Pizza with meat and fruit, thin crust
58106755	Pizza with meat and fruit, regular crust

58106760	Pizza with meat and fruit, thick crust
58106780	Pizza with meat and vegetables, lowfat, thin crust
58106820	Pizza with beans and vegetables, thin crust
58106830	Pizza with beans and vegetables, thick crust
58106910	Pizza with seafood, thin crust
58106920	Pizza with seafood, thick crust
58107030	Pizza, no cheese, NS as to type of crust
58107050	Pizza, no cheese, thin crust
58107060	Pizza, no cheese, regular crust
58107100	Pizza, no cheese, thick crust
58107220	White pizza, thin crust
58107225	White pizza, regular crust
58107230	White pizza, thick crust
58108000	Calzone, with cheese, meatless
58108010	Calzone, with meat and cheese
58108050	Pizza rolls

**\* Unless otherwise indicated, portion of food belongs to one or more proposed use category; only portion of interest was captured in the assessment (i.e., only dressing/mayonnaise portion of tuna salad in food).**

## Appendix II. SR Food Codes Included in Analysis of Background Intake of Citrus Fiber

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SR code	SR description
9111	Grapefruit, raw, pink and red and white, all areas
9116	Grapefruit, raw, white, all areas
9119	Grapefruit, sections, canned, water pack, solids and liquids
9120	Grapefruit, sections, canned, juice pack, solids and liquids
9121	Grapefruit, sections, canned, light syrup pack, solids and liquids
9123	Grapefruit juice, white, canned, unsweetened
9125	Grapefruit juice, white, frozen concentrate, unsweetened, undiluted
9126	Grapefruit juice, white, frozen concentrate, unsweetened, diluted with 3 volume water
9128	Grapefruit juice, white, raw
9150	Lemons, raw, without peel
9152	Lemon juice, raw
9153	Lemon juice, canned or bottled
9154	Lemon juice, frozen, unsweetened, single strength
9156	Lemon peel, raw
9159	Limes, raw
9160	Lime juice, raw
9161	Lime juice, canned or bottled, unsweetened
9200	Oranges, raw, all commercial varieties
9203	Oranges, raw, Florida
9206	Orange juice, raw
9207	Orange juice, canned, unsweetened
9209	Orange juice, chilled, includes from concentrate
9210	Orange juice, chilled, includes from concentrate, fortified with calcium and vitamin D
9211	Orange juice, chilled, includes from concentrate, fortified with calcium
9214	Orange juice, frozen concentrate, unsweetened, undiluted
9215	Orange juice, frozen concentrate, unsweetened, diluted with 3 volume water
9217	ORANGE-GRAPEFRUIT JUC,CND,UNSWTND
9218	Tangerines, (mandarin oranges), raw
9219	Tangerines, (mandarin oranges), canned, juice pack
9220	Tangerines, (mandarin oranges), canned, light syrup pack
9221	Tangerine juice, raw
9223	Tangerine juice, canned, sweetened
9383	Tangerines, (mandarin oranges), canned, juice pack, drained
14262	Citrus fruit juice drink, frozen concentrate
14292	Lemonade, frozen concentrate, white
14302	Limeade, frozen concentrate
14323	ORANGE DRK,CND,W/ ADDED VIT C



14327	ORANGE&APRICOT JUC DRK,CND
14334	PNAPPL&GRAPEFRUIT JUC DRK,CND
14341	PNAPPL&ORANGE JUC DRK,CND
14424	ORANGE-FLAVOR DRK,BRKfst TYPE,W/PULP,FRZ CONC
18175	Cookies, ladyfingers, with lemon juice and rind
18320	Pie, lemon meringue, commercially prepared
42149	ORANGE-STRAWBERRY-BANANA JUC
42270	ORANGE JUC DRK
43443	CITRUS JUC DRK,LO CAL

# **Sensory Evaluation of Fiberstar's Citri-Fi™ in Emulsified Frankfurters and Turkey Patties**

A Report to Fiberstar, Inc.  
N 5233 US Highway 63  
Ellsworth, WI

Prepared by Duane Wulf, Tanya Koger, and Neil Johnson  
South Dakota State University

October 21, 2004



## Materials and Methods

*Product Formulation.* Ground turkey (7% Fat Premium Quality Honeysuckle White Fresh Ground Turkey) in one pound chub packages and ground beef (73% lean) was obtained from a local supermarket. Upon arrival to the SDSU Meat Lab, the meat was removed from the package into lugs. The beef and turkey were ground separately in a Hobart Mixer-Grinder through a 1/8 inch grinder plate. All equipment was thoroughly cleaned between each batch to ensure no cross contamination.

Following grinding, the turkey was divided into 5 lb batches and mixed with Citri-Fi™ at levels of 1%, 2%, 3% and 3.5% with no additional water, and levels of 1%, 2%, 3% and 3.5% with water added to the mix at a ratio of 3 parts of water per part of Citri-Fi™. The patty mixture was vacuum packaged and placed in cold storage for approximately 24 hours.

The remaining meat was weighed into 5 lb batches and the control emulsified frankfurters were formulated (Table 1). Water, spices, and meat were mixed in a Kitchen-Aid Professional 6 Mixer to blend the spices and to obtain proper protein extraction.

**Table 1.** Ingredients for control emulsified frankfurters

Ingredient	Weight (lbs)
Meat (Turkey or Beef)	5
Water	.5
Witt's Bologna-Frank Seasoning Unit <sup>a</sup>	2.8125
Excalibur Sure Cure (6.25) <sup>b</sup>	0.125

<sup>a</sup> Witt's Bologna-Frank Seasoning Unit contains salt, corn syrup solids, spices, monosodium glutamate, and less than 1% partially hydrogenated cottonseed and or soybean oil added to prevent caking.

<sup>b</sup> Excalibur Sure Cure (6.25) contains salt, sodium nitrite (6.25%), FD and C Red #3 (0.00099%) and not more than 2% sodium silico aluminate added as an anti-caking agent.

Citri-Fi™ was blended into the control mixture at levels of 1%, 2%, 3% and 3.5% with no additional water and levels of 1%, 2%, 3% and 3.5% with water added to the mix at a ratio of 3 parts of water per part of Citri-Fi™.

After the Citri-Fi™ was mixed into the sample, the meat mixture was then emulsified in a Griffith Design and Equipment Emulsifier (Model GL86) and then stuffed through a Vemag Robot 500 Vacuum Stuffer into 28mm peelable casings. Weights were then taken on each batch, placed on racks, and smoked (Table 2) in a Fessmann Smokehouse.

**Table 2.** Smokehouse schedule for emulsified frankfurters.

Step	Process Step	Dry Bulb	Humidity	Core	Time
1	Reddening-Med Fan	110	68	0	00:05
2	Cook-Med Fan	125	20	0	00:15
3	Smoke-High Fan	135	35	0	00:30
4	Smoke-Med Fan	140	45	0	00:15
5	Smoke-High Fan	150	55	0	00:15
6	Cook-Med Fan	170	50	0	00:10
7	Steam Cook	170	0	158	0
8	Shower	0	0	100	0

After smoking and cooling, the frankfurters were peeled from the casings, and weighed. After cooking, yield measurements were calculated. The frankfurters were then vacuum packaged and placed in cold storage.

Approximately 24 hours after packaging, the turkey patty mixture was removed from the vacuum packages and 2, ¼ lb patties were formed using a Tupperware hand held patty maker. The patties were then cooked on a George Foreman electric grill until they reached an internal temperature of 165°F. The patties were then removed from the grill and into fourths, placed in Styrofoam bowls, and held in a warming oven until served. The frankfurters were boiled in water on a stove-top oven until they reached an internal temperature of 140°F. The frankfurters were then removed from the water and cut into pieces approximately 1 inch in length, placed in Styrofoam bowls, and held in a warming oven until served. Raw and cooked weights were measured and recorded to obtain yield measurements.

*Panel.* A trained sensory panel was conducted according to standards set by the American Meat Science Association. Panelists were recruited from the South Dakota State University campus, Brookings, SD. Six trained panelists participated in the study. The panel was conducted in booths preventing panelist interaction. Prior to the start of the panel, panelists were given brief instructions about panel procedure and were asked to sign a notice of informed consent. All samples were served under red lights to limit differences in visual appearance. One sample of each treatment combination was served in a random order to the panel. Nine samples were served of turkey patties, emulsified turkey frankfurters, and emulsified beef frankfurters with a 7-10 minute break being taken between each group. Samples were coded with a random code to blind consumers to treatment combinations. The samples were scored on a scale of 1-8 (Figure 1).

**Figure 1.** Ballot used in trained taste panel.

**Taste Panel Form**

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

	<b>Tenderness</b>	<b>Juiciness</b>	<b>Flavor</b>	<b>Texture</b>	<b>Comments</b>
<b>1</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
<b>2</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
<b>3</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
<b>4</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
<b>5</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
<b>6</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
<b>7</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
<b>8</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	
<b>9</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	

**Tenderness**

1 Ext. Tough  
 2 Very Tough  
 3 Mod. Tough  
 4 Sl. Tough  
 5 Sl. Tender  
 6 Mod. Tender  
 7 Very Tender  
 8 Ext. Tender

**Juiciness**

1 Ext. Dry  
 2 Very Dry  
 3 Mod. Dry  
 4 Sl. Dry  
 5 Sl. Juicy  
 6 Mod. Juicy  
 7 Very Juicy  
 8 Ext. Juicy

**Flavor**

1 Ext. Bland  
 2 Very Bland  
 3 Mod. Bland  
 4 Sl. Bland  
 5 Sl. Intense  
 6 Mod. Intense  
 7 Very Intense  
 8 Ext. Intense

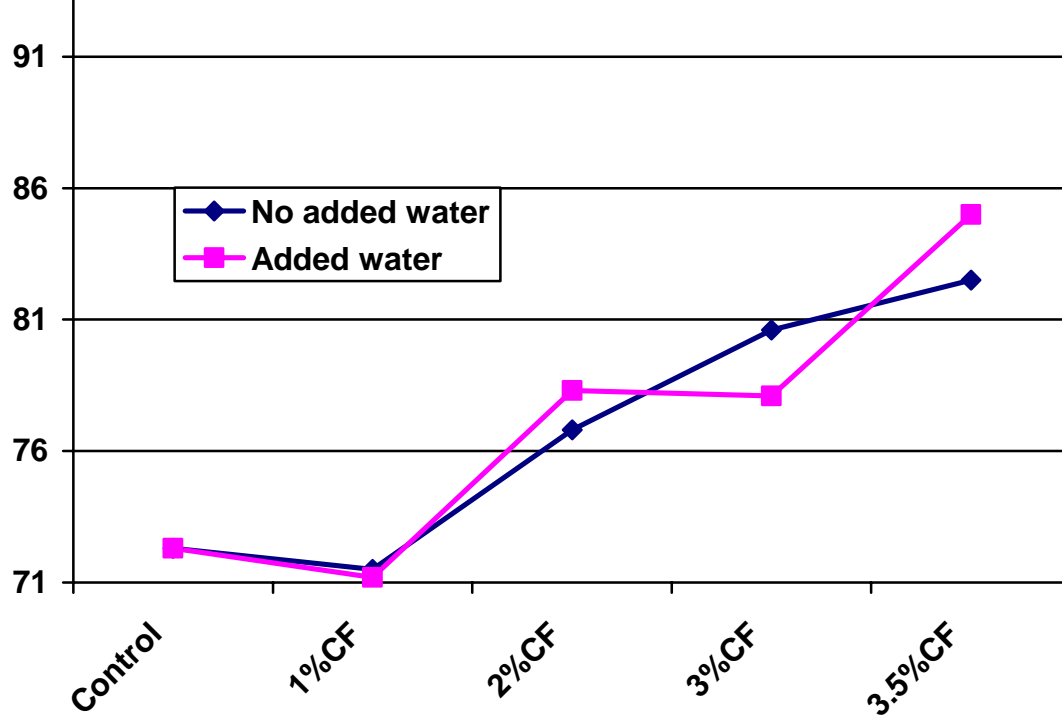
**Texture**

1 Ext. Rubbery  
 2 Very Rubbery  
 3 Mod. Rubbery  
 4 Sl. Rubbery  
 5 Sl. Crumbly  
 6 Mod. Crumbly  
 7 Very Crumbly  
 8 Ext. Crumbly

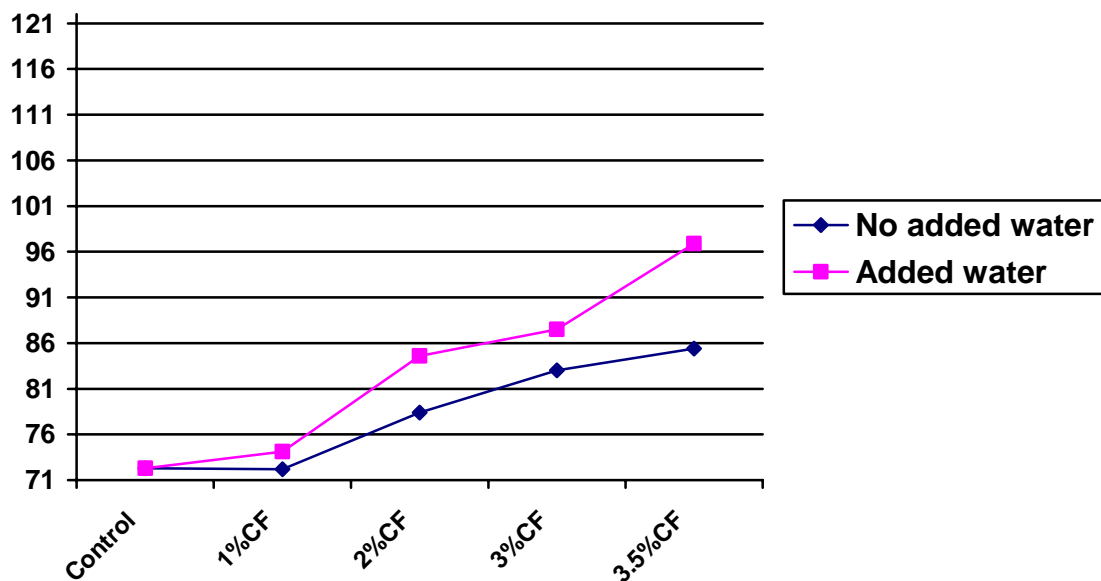
*Data Analysis.* Average values for each palatability trait were calculated for each treatment combination. Cooking yield and green yield were determined by dividing the cooked weight by the raw weight, and by dividing the cooked weight by the green (meat block) weight, respectively.

## Results

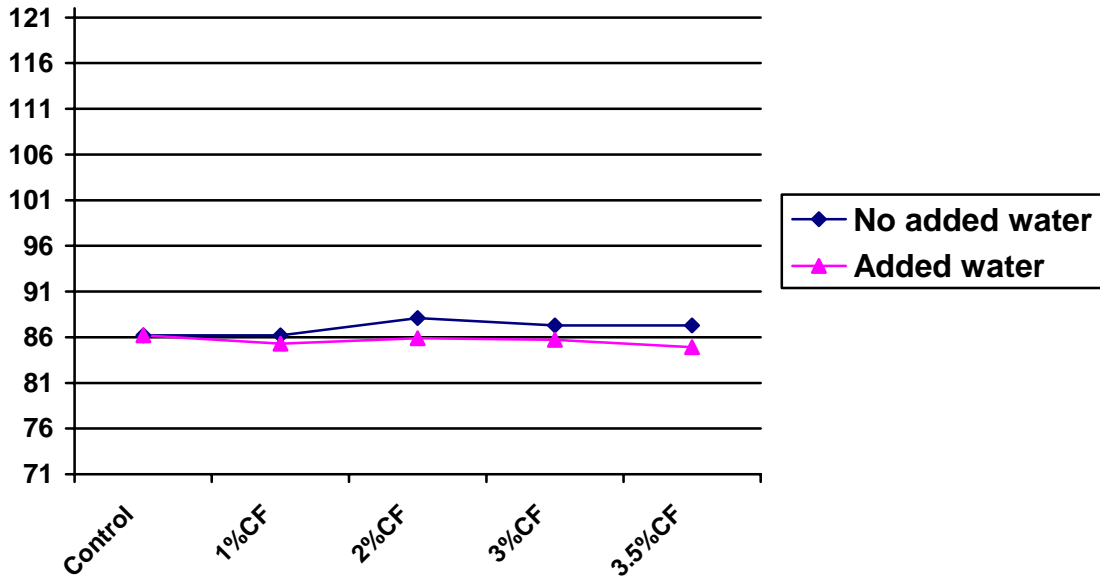
**Figure 2. Cooking yield of Turkey Patties containing various levels of Citri-Fi.**



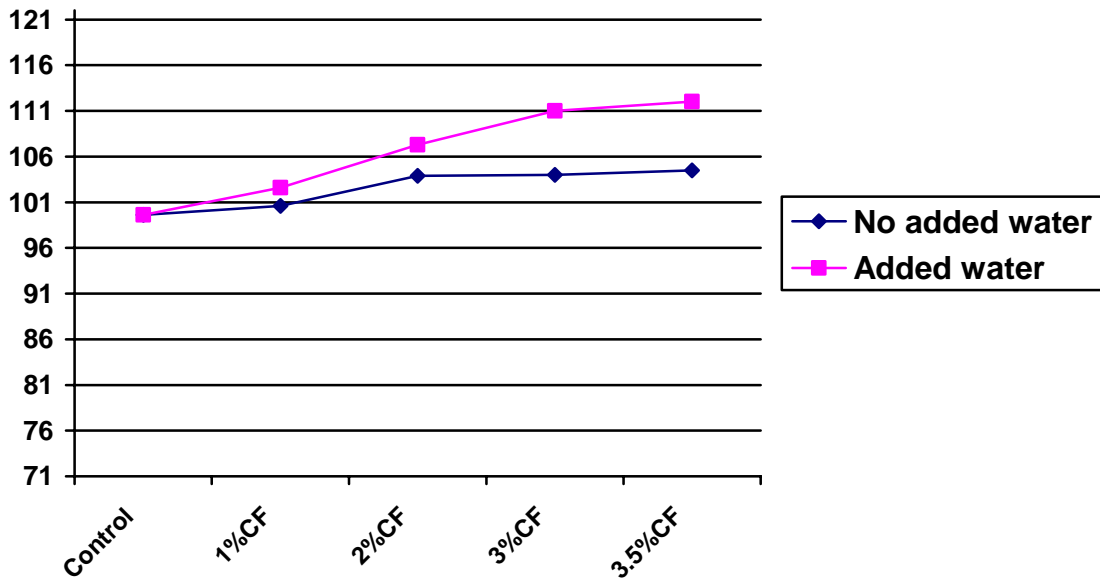
**Figure 3. Green yield of Turkey Patties containing various levels of Citri-Fi.**



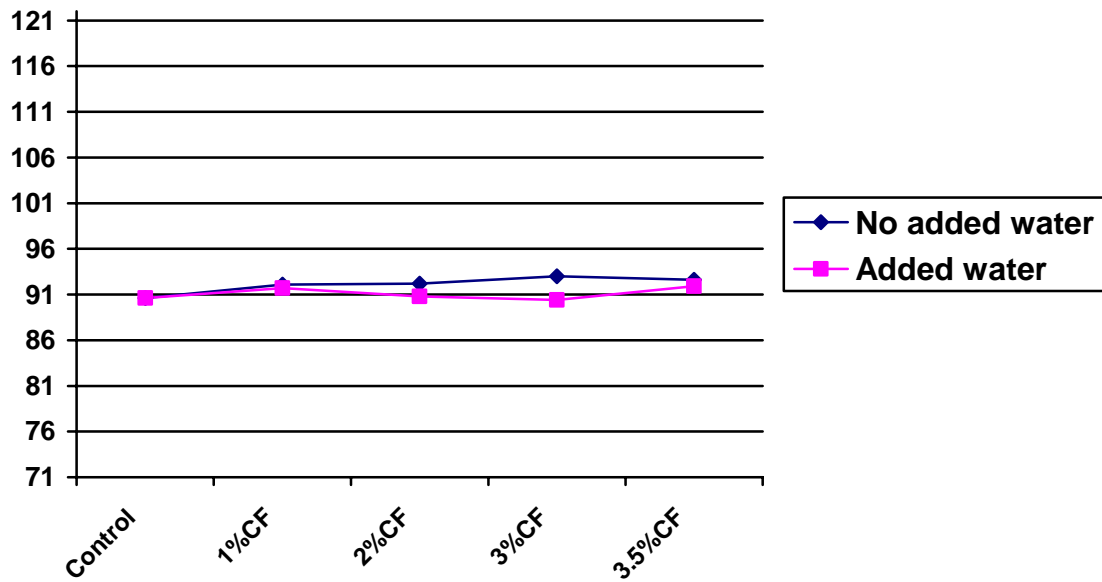
**Figure 4. Cooking yield of Emulsified Turkey Frankfurters containing various levels of Citri-Fi.**



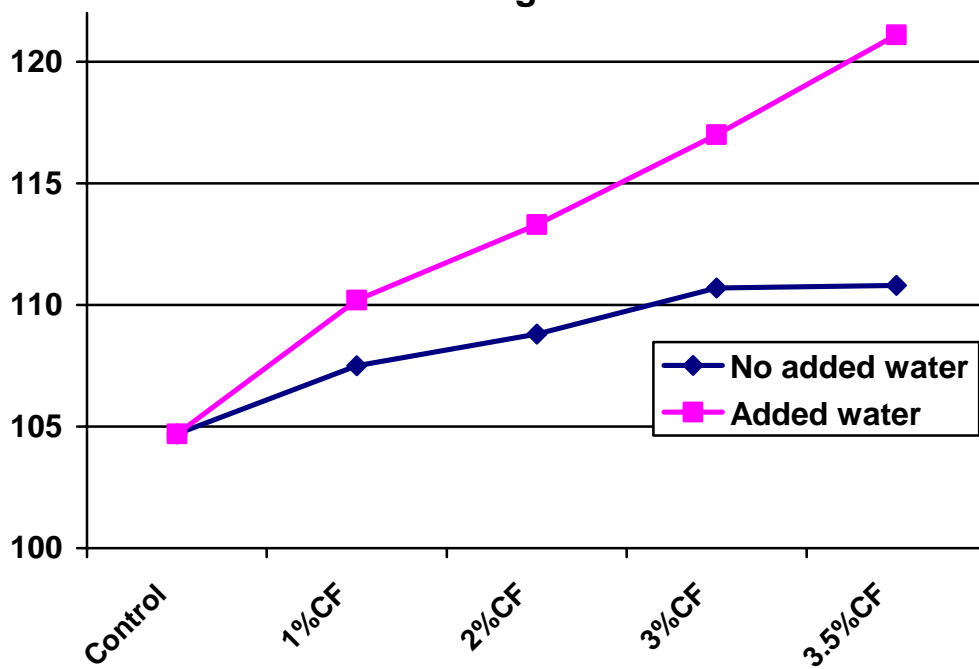
**Figure 5. Green yield of Emulsified Turkey Frankfurters containing various levels of Citri-Fi.**



**Figure 6. Cooking yield of Emulsified Beef Frankfurters containing various levels of Citri-Fi.**

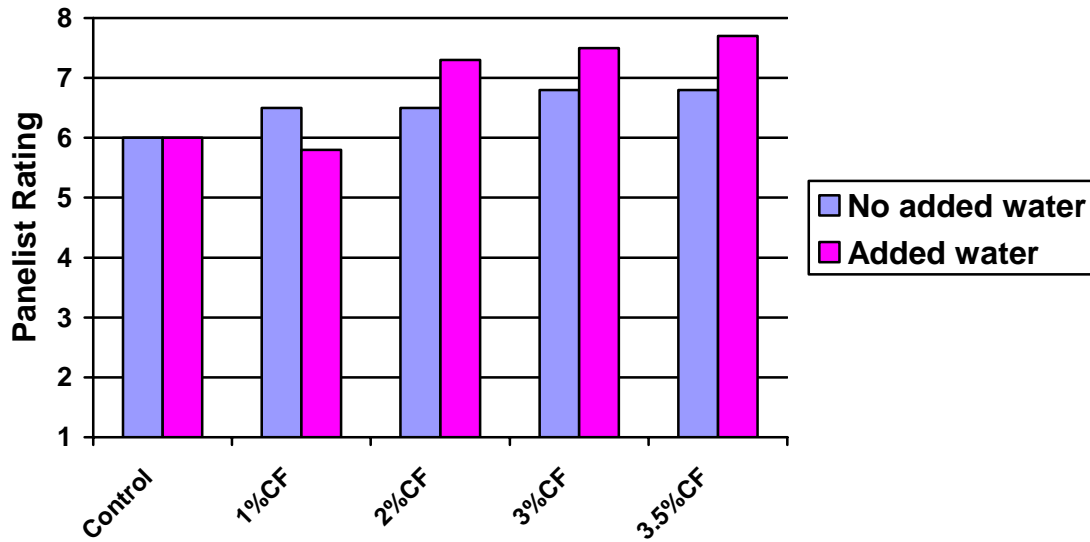


**Figure 8. Green yield of Emulsified Beef Frankfurters containing various levels of Citri-Fi.**

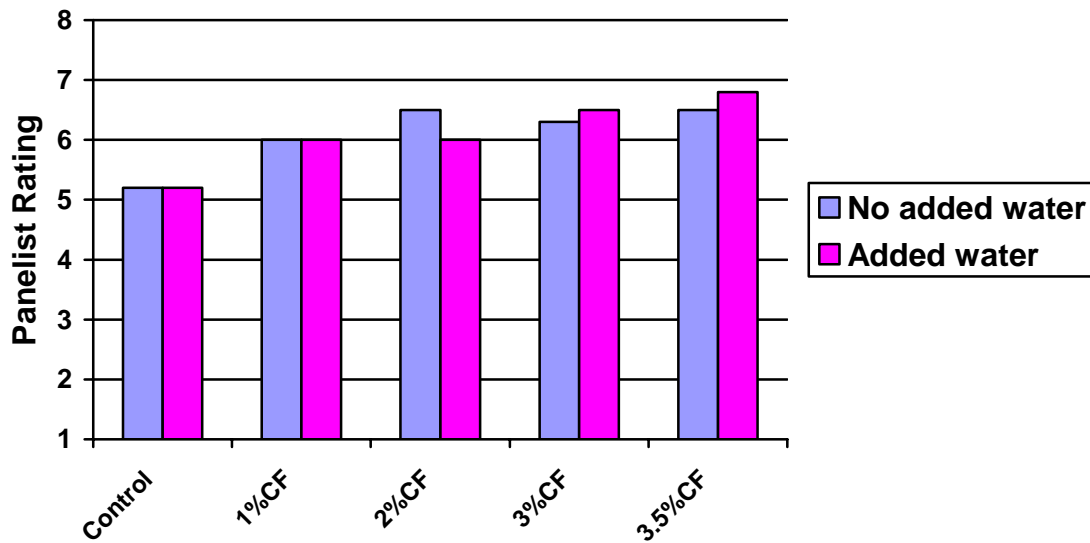




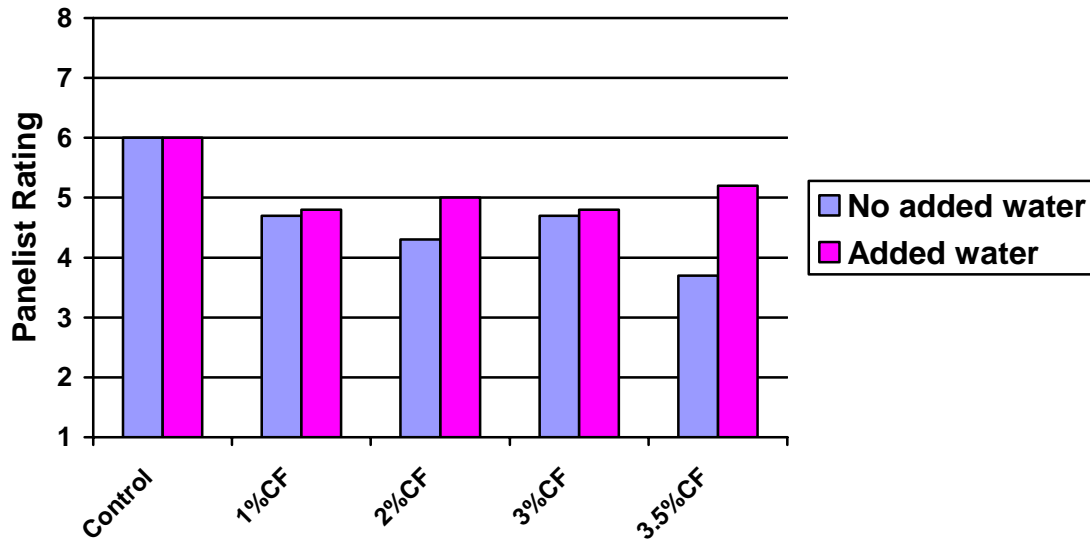
**Table 3. Effect of level of Citri-Fi on Tenderness of Turkey Patties (1=Extremely Tough, 8=Extremely Tender)**



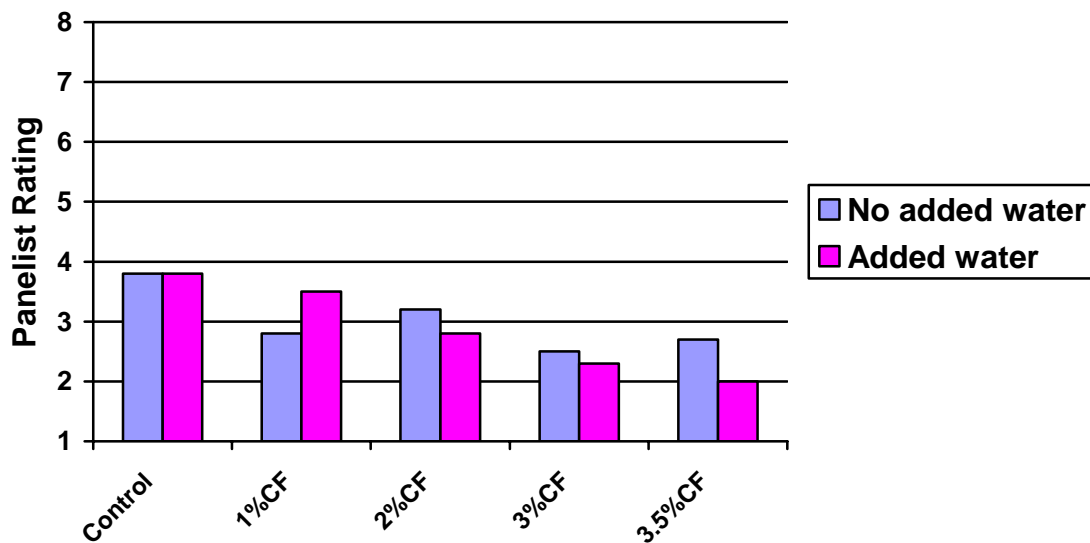
**Table 4. Effect of level of Citri-Fi on Texture of Turkey Patties (1=Extremely Rubbery, 8=Extremely Crumbly)**



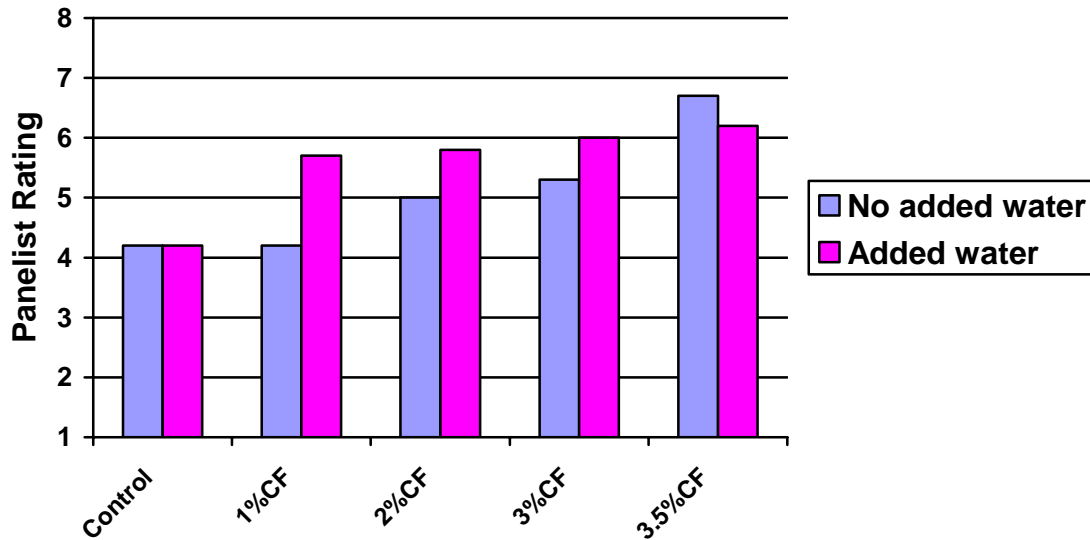
**Table 5. Effect of level of Citri-Fi on Juiciness of Turkey Patties (1=Extremely Dry, 8=Extremely Juicy)**



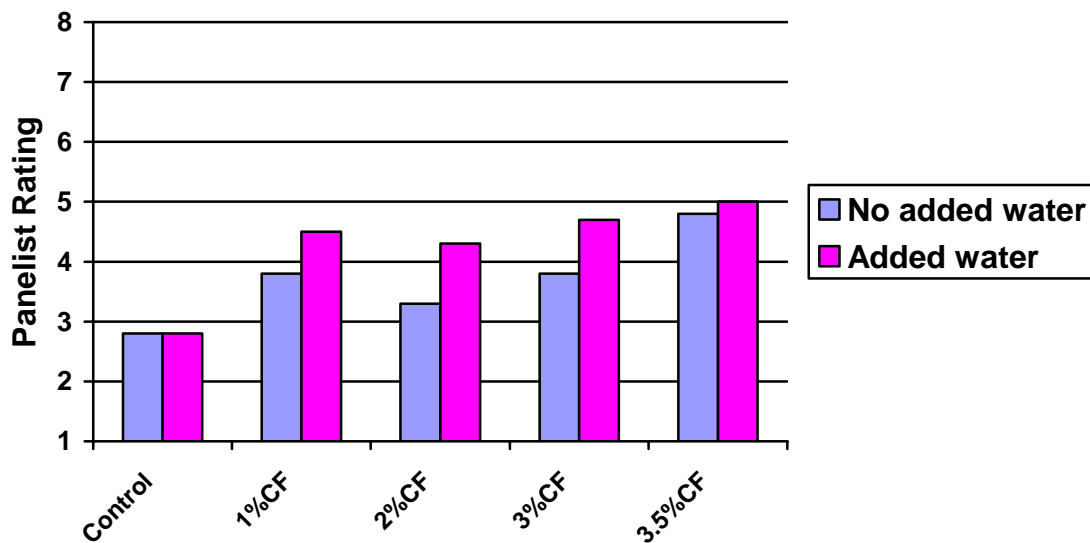
**Table 6. Effect of level of Citri-Fi on Flavor of Turkey Patties (1=Extremely Bland, 8=Extremely Intense)**



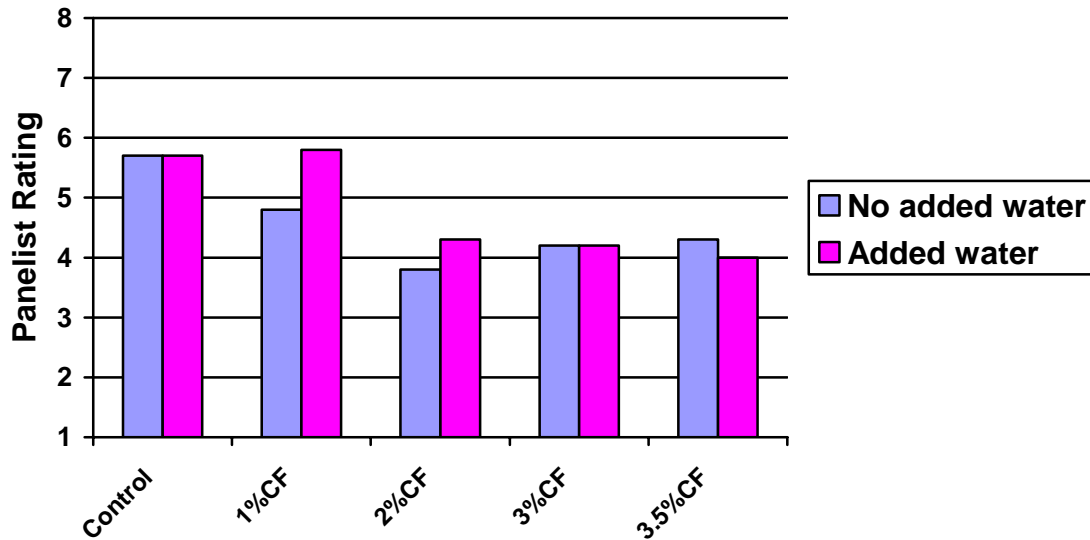
**Table 7. Effect of level of Citri-Fi on Tenderness of Emulsified Turkey Frankfurters (1=Extremely Tough, 8=Extremely Tender)**



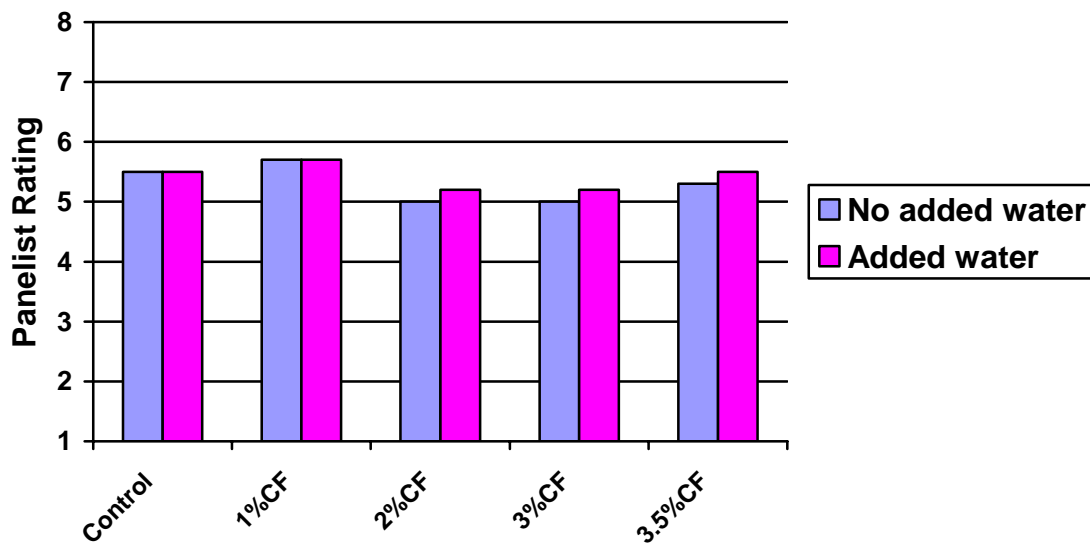
**Table 8. Effect of level of Citri-Fi on Texture of Emulsified Turkey Frankfurters (1=Extremely Rubbery, 8=Extremely Crumbly)**



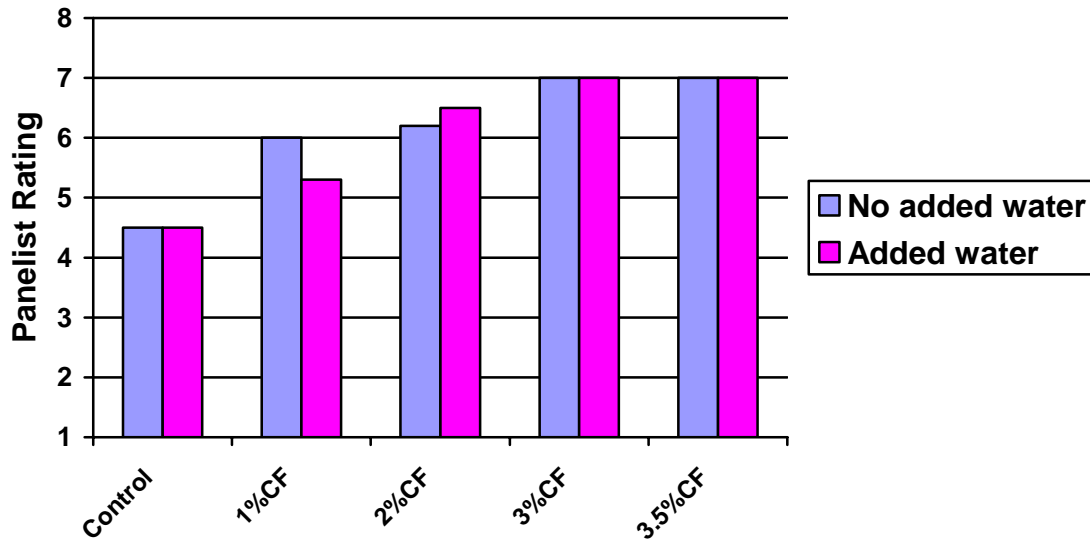
**Table 9. Effect of level of Citri-Fi on Juiciness of Emulsified Turkey Frankfurters (1=Extremely Dry, 8=Extremely Juicy)**



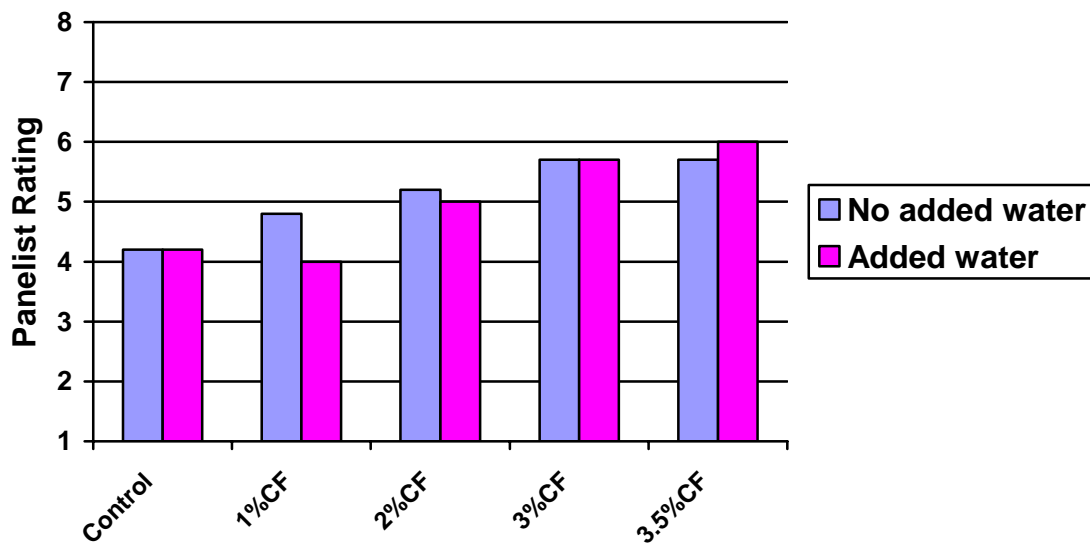
**Table 10. Effect of level of Citri-Fi on Flavor of Emulsified Turkey Frankfurters (1=Extremely Bland, 8=Extremely Intense)**



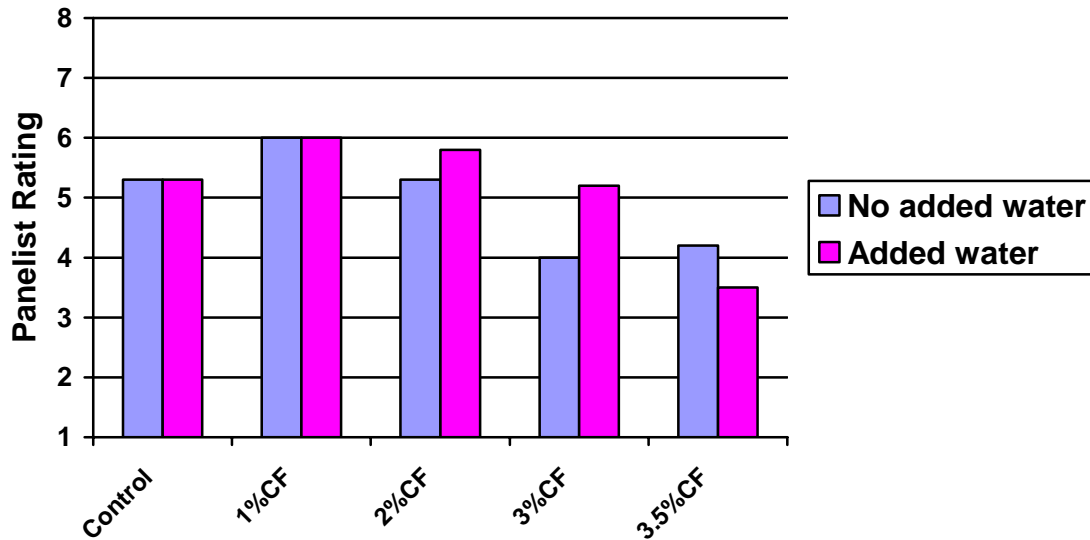
**Table 11. Effect of level of Citri-Fi on Tenderness of Emulsified Beef Frankfurters (1=Extremely Tough, 8=Extremely Tender)**



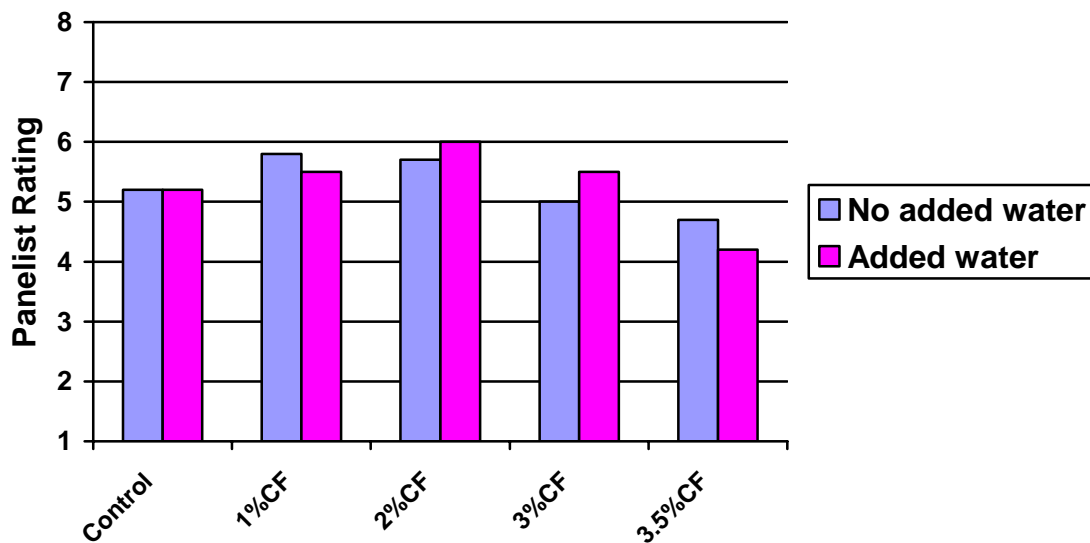
**Table 12. Effect of level of Citri-Fi on Texture of Emulsified Beef Frankfurters (1=Extremely Rubbery, 8=Extremely Crumbly)**



**Table 13. Effect of level of Citri-Fi on Juiciness of Emulsified Beef Frankfurters (1=Extremely Dry, 8=Extremely Juicy)**



**Table 14. Effect of level of Citri-Fi Flavor of Emulsified Beef Frankfurters (1=Extremely Bland, 8=Extremely Intense)**



# Sensory Evaluation of Fiberstar's Citri-Fi™ in a breakfast sausage

Brock Lundberg, M.S., P.E.

## Introduction

The objective of this study was to evaluate taste, texture, and moisture characteristics of a meat product when using various usage levels of Fiberstar's all natural Citri-Fi™. Past studies have focused on using Citri-Fi™ to improve mouthfeel and antioxidant properties of the meat product. One of these studies has been published in the *Journal of Food Science* (Katsanidis et al, 2001). Although these studies focused on making sure the test containing Citri-Fi™ had acceptable or improved sensory characteristics compared to the control, a study is needed to test Citri-Fi™ at various levels to quantify the sensory characteristics of a meat product in terms of taste, texture, and moisture.

## Materials and Methods

A breakfast sausage mix containing 75% lean pork was purchased from a local meat market. The formula for the control sausage is shown in the following table.

**Table 1:** Formula for the control breakfast sausage.

Ingredient	Weight (lbs)
Pork (75% lean)	25
water	1.5
Sausage seasoning premix	0.5

\*Sausage premix contains: salt, dextrose, sugar, monosodium glutamate, spices, flavorings, BHA, propyl gallate, citric acid.

Citri-Fi™ was mixed into 200 g of the sausage mix at levels of 1%, 2%, 3%, and 3.5%. In the first round of testing, no additional water was added to determine the yield and sensory effects without water addition. In the second round of testing water was added to the mix at a ratio of 3 parts of water per part of Citri-Fi™.

After the Citri-Fi™ was mixed into the sample, 60 gram patties were measured out and formed into a patty with uniform thickness, width, and length. The patties were then placed on a griddle preheated to 350 F for a total of 10 minutes (5 minutes per side).

After cooking, the patties were evaluated in terms of taste, texture, and moistness sensory, and were scored on a scale of 1 (poor) to 10 (outstanding). Yield measurements were also taken by measuring the post cooked weight.

## Results

### Experiment 1: No additional water added

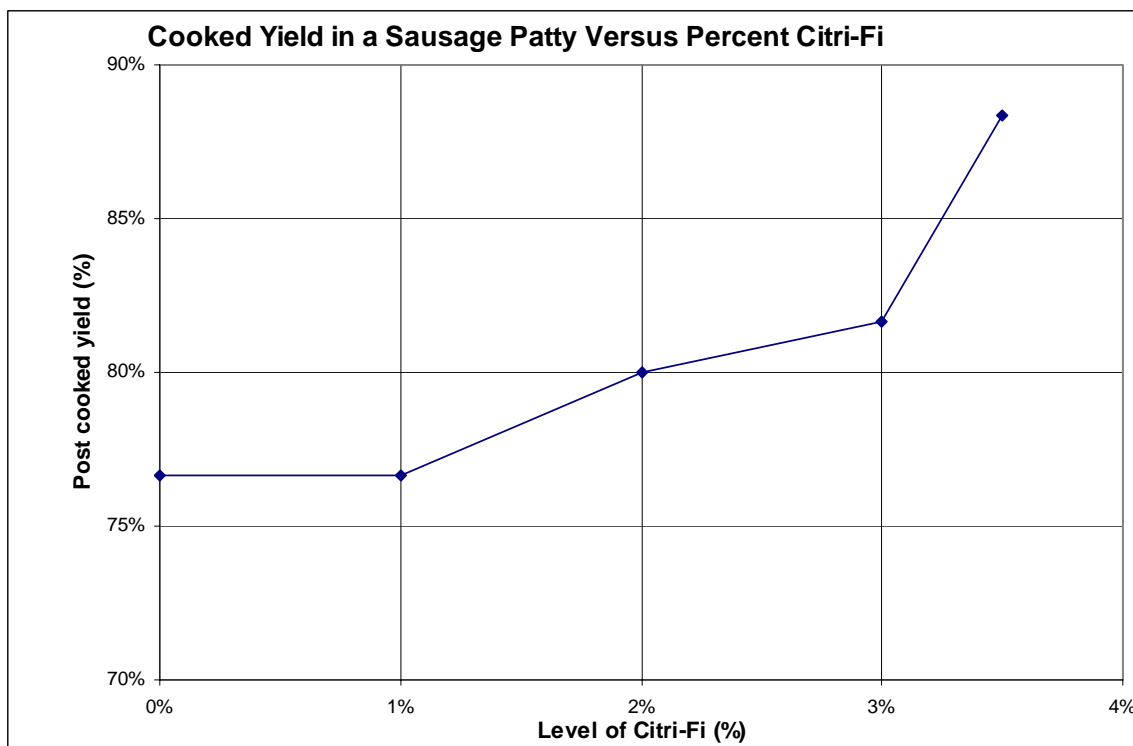
The sensory evaluations of the cooked sausage that did not have any water added are shown in the Table 2.

Test	Taste	Texture	Moistness
Control	7	5	5
1.0%	7	6	5
2.0%	7	6	6
3.0%	7	5	5
3.5%	6	5	4

**Table 2:** Sensory evaluation of the breakfast sausage containing various levels of Citri-Fi™ with no additional water.

As the sensory results show, although there was a slight degradation of texture at the 3.5% level, at levels less than 3.5% there was no degradation in terms of taste, texture, or sense of moistness. Part of the reason for the improved texture or maintained taste of the test products could be attributed to the increased yield of the product during cooking, which allows the natural juices and flavors of the sausage to be retained in the cooking process. Figure 1 shows a graph of the post cooked yield versus percentage of Citri-Fi™.





**Figure 1:** Graph of post-cooked patty weight versus the amount of Citri-Fi™ used in the sausage patty. No additional water was added to the formulas and each patty had a starting weight of 60 grams.

Visually, there was not a lot of difference between the various levels of Citri-Fi™ in the test patties both before and after cooking. The photos shown in Figure 2 and Figure 3 show the patties both before and after cooking.



**Figure 2:** Photo of the sausage patties before cooking. From the left to the right the photo shows the control, 1%, 2%, 3%, and 3.5% Citri-Fi™.



**Figure 3:** Photo of the sausage patties after cooking. The top left is the control and the top right is 1%. On the bottom row from the left to right the patties contain 2%, 3%, and 3.5% Citri-Fi™.

### Experiment 2: Three times the weight of Citri-Fi™ added to the sausage

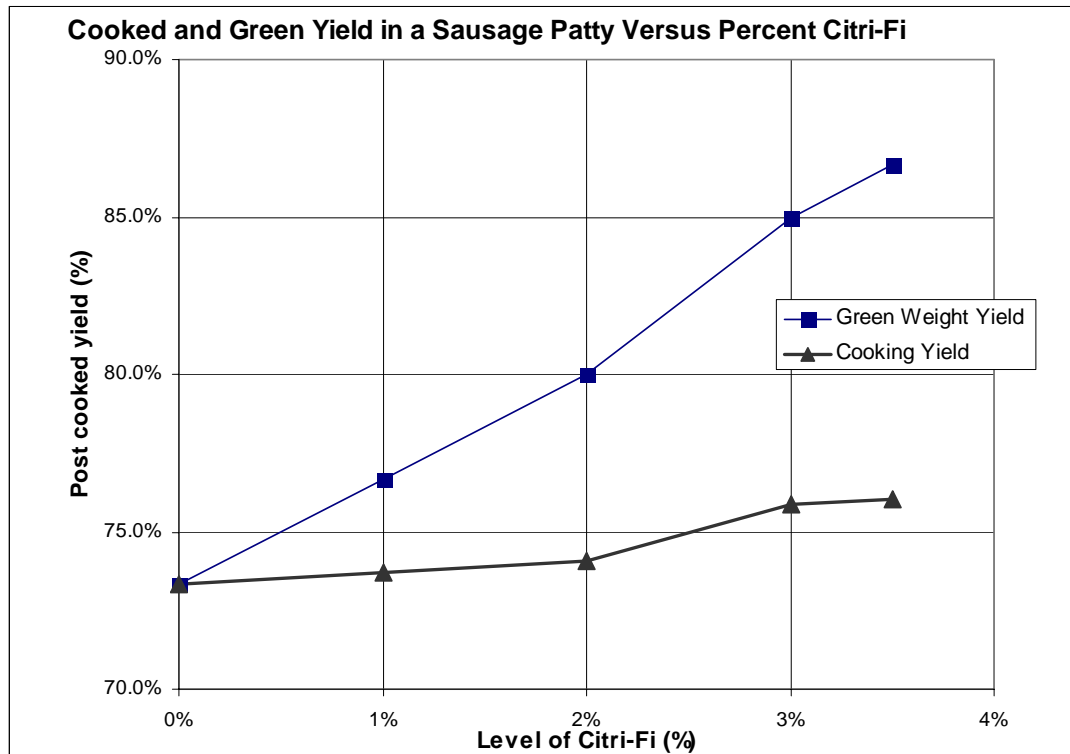
Because Citri-Fi™ can be used to bind water and extend certain types of meat products, an additional test was conducted that added extra water in the amount of three times the weight of Citri-Fi™ in the formula. For example, in a 60 g patty that contained 1% Citri-Fi™, the amount of additional water added was  $60 \times 0.01 \times 3 = 1.8$  g. Table 3 shows the sensory evaluations when the additional water was added to the mix.

Test	Taste	Texture	Moistness
Control	7	5	5
1.0%	7	7	5
2.0%	6	7	7
3.0%	6	6	7
3.5%	6	5	7

**Table 3:** Sensory scores of the breakfast sausage containing various levels of Citri-Fi™ and additional water in the amount of 3 times the weight of Citri-Fi™.

The sensory values for the added patties with the added water appear to be similar or even slightly improved compared to the control. The taste qualities were similar for all the tests and did not show any flavor dilution. Likewise, the texture and moistness mouthfeel for all the tests were equivalent or improved compared to the control. One explanation for this could be from both the retained moisture from the increased yields compared to the control as well as the natural fat or meat like mouthfeel that Citri-Fi™ imparts in meat product.

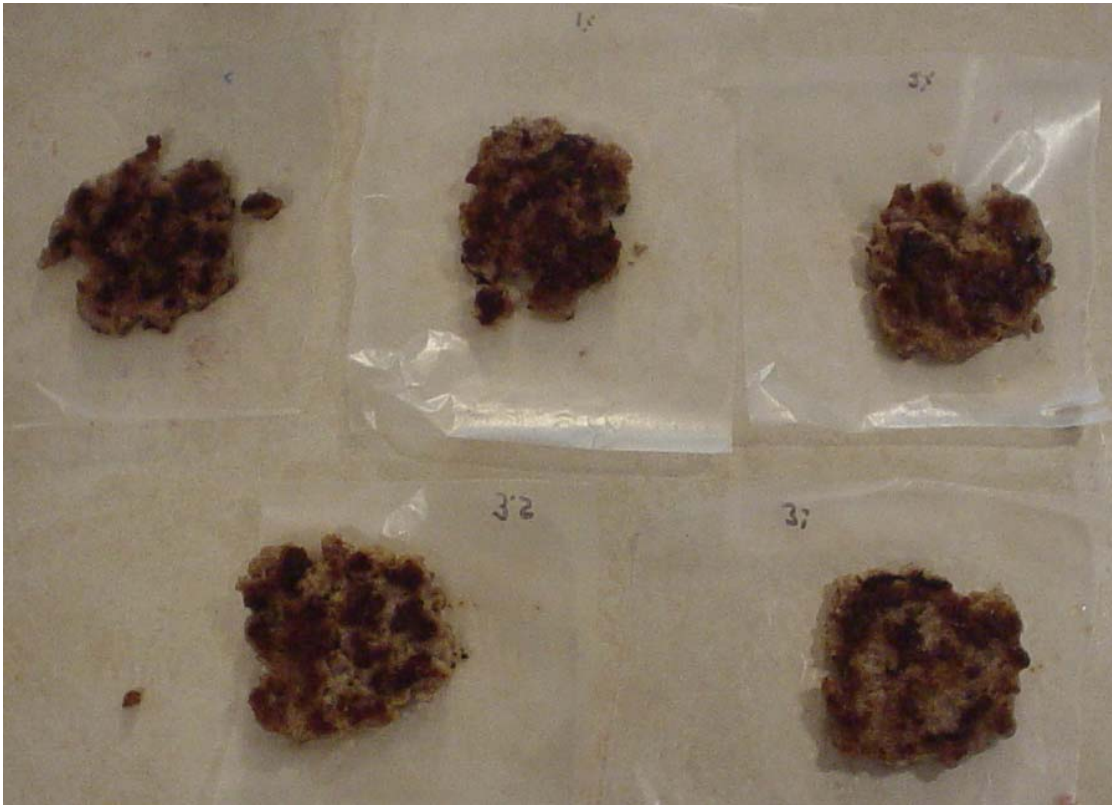
Figure 4 shows both the cooking yield and green weight yield of the sausage patties made with the additional water. The data suggests a near linear relationship between the cooking yield and the amount of Citri-Fi™ in the product. However, based on the green weight, the relationship between yield and Citri-Fi™ level is a flatter slope compared to the first experiment where no additional water was added. Photos were taken of both the precooked and cooked sausage patties, which are shown in Figure 5 and Figure 6 respectively.



**Figure 4:** Cooked and green yield of sausage patties versus amount of Citri-Fi™. For each part of Citri-Fi™ added to the sausage premix three parts of additional water was added.



**Figure 5:** Photo of the pre-cooked sausage patties that contained varying levels of Citri-Fi™ with three parts of water added per part of Citri-Fi™. The control is on the top right and 1% Citri-Fi™ is on the top right. On the bottom moving left to right is 2%, 3%, and 3.5% Citri-Fi™.



**Figure 6:** Photo of the cooked sausage patties that contained varying levels of Citri-Fi™ with three parts of water added per part of Citri-Fi™. The top row from left to right contains the control, 1%, and 2% Citri-Fi™. The bottom left is 3.5% and bottom right is 3% Citri-Fi™.

### Conclusions

At levels of 1%, 2%, 3% and 3.5% Citri-Fi™ there was no detected off flavors or reduction in sensory scoring in terms of taste, texture, or moistness compared to a control in a breakfast sausage patty. Another benefit of adding Citri-Fi™ to the sausage patty was the improvement in yields of the patties while improving or maintaining a similar sensory scoring. Based on the results of this study, adding Citri-Fi™ at a level of 3% or less would not be an inappropriate amount to add to a meat product.

### References

Katsanidis, E., D.C. Meyer, R.J. Epley, P.B. Addis, R. Ruan. 2001. Solublized Cellulose and Dehydrated Potato Extract in Cooked, Low-fat Comminuted Beef. *Journal of Food Science*. Vol 66, No 5.



UNITED STATES DEPARTMENT OF AGRICULTURE  
FOOD SAFETY AND INSPECTION SERVICE  
WASHINGTON, DC

# FSIS DIRECTIVE

7120.1  
Revision 16

8/13/13

## SAFE AND SUITABLE INGREDIENTS USED IN THE PRODUCTION OF MEAT, POULTRY, AND EGG PRODUCTS

### I. PURPOSE

This directive provides inspection program personnel (IPP) with an up-to-date list of substances that may be used in the production of meat, poultry, and egg products. FSIS will continue to update this directive quarterly by issuing revisions to this directive as opposed to issuing amendments to the directive.

### II. CANCELLATION

FSIS Directive 7120.1, Revision 15, Safe and Suitable Ingredients Used in The Production of Meat, Poultry, and Egg Products, dated April 30, 2013.

### III. REASON FOR REISSUANCE

This revision includes updates to the list of substances added since the April 30, 2013, issuance of the directive. Updates to this directive appear in Table 1. Changes are in **bold** in Table 2.

Table 1: Summary of Updates to list of substances

Substance	Page Number	Category	Type of Update
An aqueous solution of hydrochloric acid, phosphoric acid, and lactic acid, as a pH control agent on raw and ready- to-eat (RTE) beef products and in water used in poultry processing	4	Acidifiers/Alkalizers	New
Sodium metasilicate in poultry chiller water	7	Acidifiers/Alkalizers	New
An aqueous solution of hydrochloric acid, phosphoric acid, and lactic acid in raw and ready-to- eat (RTE) beef products and poultry carcasses, parts, trim, and organs	8	Antimicrobial	New

		123 products		
Microcrystalline cellulose and sodium carboxymethylcellulose	As a fat replacer and binder in standardized and non-standardized comminuted meat and poultry products	In standardized comminuted meat and poultry products where binders are permitted and in non-standardized comminuted meat and poultry products at levels up to 3 percent	Acceptability determination	Listed as “cellulose gel, cellulose gum” in the ingredients statement (2)
MPEs (Meat Protein Extracts) (poultry protein, beef protein, and pork protein). Produced through the use of Flavourzyme enzyme up to 0.5% by weight of raw meat and poultry products or the combination of Flavourzyme and Protamex enzymes up to 0.5% each by weight of raw meat and poultry products	As binding agents and coatings (flavorings) in meat and poultry products of the same species	In nonstandardized meat and poultry products that permit binders at levels not to exceed 0.89% by weight and in standardized meat and poultry products where standards of identity permit at levels not to exceed 0.89% by weight	Acceptability determination	Listed as “partially hydrolyzed (source of protein) in the ingredients statement (2)
Oat Hull Fiber	Various non-standardized comminuted meat products	Not to exceed 3.5 percent of the product formulation	GRAS Notice No. 000261	Listed as “isolated oat product” in the ingredients statement (2)
Oat Hull Fiber	Whole muscle and comminuted poultry products where binders are permitted	Not to exceed 3.5 percent of the product formulation	GRAS Notice No. 000342	Listed as “isolated oat product” in the ingredients statement (2)
Oat Fiber	Various meat products (e.g., frankfurters, sausage patties, loaves) where binders are permitted and whole muscle meat products	Not to exceed 3.5 percent of the product formulation	Acceptability determination	Listed as “isolated oat product” or “modified oat product” in the ingredients statement. Whole muscle meat products must be descriptively labeled (4)
Orange pulp, dried	Non-standardized whole muscle meat and poultry products where binders are permitted and standardized whole muscle meat and	Not to exceed 3.5 percent of the product formulation	Acceptability determination	List as “citrus flour” or “dried orange pulp” (2)

	poultry products where standards of identity permit the use of binders			
Orange pulp, dried and orange pulp, dried with guar gum	Various ground meat and poultry products where binders are permitted	Not to exceed 3.5 percent of the product formulation	GRAS Notice No. 000154	List as “citrus flour” or “dried orange pulp” (2)
Partially hydrolyzed proteins	Various meat and poultry products where binders are permitted.	Not to exceed 3.5 percent of the product formulation	Acceptability determination	Listed by common or usual name in the ingredients statement (2)
Pea fiber	Standardized meat and poultry products where binders are permitted and non-standardized meat and poultry products, e.g., meat patties and poultry nuggets	Sufficient for purpose	Acceptability determination	Listed as “isolated pea product” (2)
Pectin	Various meat and poultry products where binders are permitted	Not to exceed 3 percent of the product formulation	Acceptability determination	Listed by common or usual name in the ingredients statement (2)
Plum extract, Plum puree, Plum fiber, Plum powder	Whole cuts of meat and poultry products. Various, meat and poultry products where binders are permitted.	Not to exceed Up to 2% product formulation	Acceptability Determination	List as “isolated plum product”
Pork collagen	Various meat and poultry food products where binders are permitted	Not to exceed 3.5 percent of the product formulation	Acceptability determination	Listed by common or usual name in the ingredients statement (2)
Pork skin proteins	Various meat products where binders are permitted	Not to exceed 1.5 percent of product formulation	Acceptability determination	Listed by common or usual name in the ingredients statement (4)
Pork Protein	As a coating or marinade or addition to pork when the pork protein is used as (a) water binding agent to retain moisture and/or (b) block fat in cooked product	Pork protein is only used in pork products where binders are permitted and the ingredient “Pork Protein” is appropriately declared on the label of raw “Pork with Pork Protein” product per 9 CFR Section 317.2(c)(2); when used as	GRAS Notice No. 000314	“Pork Protein” used when the protein concentration is 21% or less; “Concentrated Pork Protein” used when protein concentration is greater than 21%. Final determination will be made by FSIS when label is submitted for



# **Use of Citri-Fi® Products in Injected Meat and Poultry Items**

by

Brock Lundberg, M.S., P.E.

Laura Valverde, M.S.

July 28, 2009

**A suitability report submitted to FSIS for using dried orange pulp in injected meat  
and poultry items**

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## **I. OVERVIEW**

Citri-Fi® products, e.g. dried orange pulp, are used for their ability to bind large amounts of water at low usage levels in a wide variety of meat, dairy, bakery, and other applications. The functional, i.e. absorbent, nature of Citri-Fi products is due to Fiberstar's unique process. No artificial chemicals are used in the manufacturing process of native orange pulp. The raw material for Citri-Fi is the same orange pulp consumed when people consume oranges or orange juice with pulp and Fiberstar's process contains only mechanical, heat, and drying process steps to produce the finished product.

Citri-Fi® products are GRAS for use in meat and poultry products, i.e. GRN 154. Dried orange pulp also is included in FSIS's Safe and Suitable list for use in ground meat and poultry products. At the time of the original GRAS notification, Fiberstar did not have data to demonstrate how Citri-Fi products could be used in injected meat and poultry products. However, as a result of customer and internal testing and products introduced in other countries, Fiberstar has found that injected meat and poultry products are a very good use for the Citri-Fi products. The objective of the present study was to evaluate functionality and sensory of using Fiberstar's all natural Citri-Fi® in various injected meat and poultry items to support that Citri Fi is suitable for use in these products.

This report provides data that were collected in a series of comparison studies utilizing Citri-Fi in injected meat and poultry items. All the testing done in these studies were conducted using the Citri-Fi product that contains only dried orange pulp, i.e. Citri-Fi 100, Citri-Fi 100FG, or Citri-Fi 100M40. The only difference between these products is their particle size, i.e. Citri-Fi 100 is a minus 30 mesh product, Citri-Fi 100FG is a minus 100 mesh product, and Citri-Fi 100M40 is a minus 200 mesh product. Similar results would be expected with other Citri-Fi products.

## **II. CHICKEN**

The first study done with Citri-Fi products was in an injected chicken product. Three treatments were compared: control with salt only, salt with sodium tripolyphosphate, and salt with Citri-Fi. All treatments in this study were injected at a 15% injection level.

### **Materials and Methods**

This study was conducted in the pilot plant of the University of Wisconsin-Madison. Skinless and boneless chicken breasts were purchased from a local producer and kept refrigerated until use. The ingredients of the brine are shown in Table 2.1. The brine was vigorously mixed in a 5 gallons plastic pocket with a lightning mixer. A pilot plant scale injector Fomaco Reiser ® (see Appendix I) was used to inject the chicken at 15% of their original weight. A total of 10 lbs of chicken were injected. After injection, the chicken was tumbled for 1 hour in a Lyco Marinator ® LT-40 at 35°F and held overnight in industrial size cooler kept at 35°F or below. After approximately an 18 hour period, the chicken was vacuum sealed and water cooked in a heat sealed bag until the internal temperature reached 160°F.

<b>Ingredient</b>	<b>Control (%)</b>	<b>Phosphate (%)</b>	<b>Citri-Fi® (%)</b>
Water	92.5	88.7	88.7
Sodium Tripolyphosphate	0.0	3.8	0.0
Salt	7.5	7.5	7.5
Citri-Fi® 100M40	0.0	0.0	3.8

**Table 2.1:** Brine formulas used for injecting the chicken tests to attain 0.5% Citri-Fi or 0.5% sodium tripolyphosphate in the final product.

At a 15% injection level, the brine formulas outlined in Table 2.1, resulted in 0.5% sodium tripolyphosphate or 0.5% Citri-Fi 100M40 in the final chicken.

Here is the procedure for the injected chicken.

1. Weigh out brine ingredients and add to the water.
2. Mix the brine for another 5-8 minutes.
3. Weigh the chicken and inject at 15% injection rate based on the weight of the chicken weight.
4. After injecting, place the chicken in a tumbler and tumble for 1 hour and hold overnight for approximately 18 hours at 35 °F.
5. After the 18 hour period, place the chicken in vacuum sealed bags and water cook to an internal temperature of 160 °F. It took approximately 2-3 hours to cook.
6. Cool the chicken in ice and take the finished cooked weight to determine the cooking yield. Cooked yield an overall yield were calculated using the formulas below:

$\text{Cooked Yield} = \text{Post cooked chicken weight} / \text{post injected chicken weight} \times 100\%$

$\text{Overall yield} = \text{cooked weight} / \text{raw preinjected chicken weight} \times 100\%$

## Results

Table 2.2 shows the purge results after the 18 hour holding period before the cooking. The amount of purge was calculated by subtracting the post injection weight at 18 hours from the post injection weight right after injection. The result was divided by the post injected chicken weight times 100%. The control without phosphates or Citri-Fi had the most purge at 6.3% while the product injected with 0.5% sodium tripolyphosphate had 3.5% purge and the product injected with 0.5% Citri-Fi had the least purge at 2.7%. Figure 2.1 shows a photo of the precooked chicken samples following the 18 hour holding period.

Test	Purge
0.5% Sodium Tripolyphosphate	3.50%
0.5% Citri-Fi 100M40	2.70%
Control (No phosphate or Citri-Fi)	6.30%

**Table 2.2:** 18 hour purge for the post injected / pre cooked chicken samples.



**Figure 2.1:** Photo of the pre cooked / post injected chicken samples. The control is on the left, the phosphate injected product in the middle, and Citri-Fi containing product is on the right in the photo.

Overall yield, measured as the weight of cooked chicken product produced divided by the starting raw or preinjected chicken weight times 100%, was 92% for the phosphate treatment and 90.4% for the Citri-Fi treatment (Table 2.3). In contrast, the control had an overall yield of 81.8%. Thus, use of Citri-Fi resulted in a 8.6% yield increase.

Test	Overall yield
0.5% Sodium Tripolyphosphate	92.0%
0.5% Citri-Fi 100M40	90.4%
No phosphate or Citri-Fi	81.8%

**Table 2.3:** Overall yield after 15% injected chicken.

### Sensory Analysis

The chicken samples (control, 0.5% tripolyphosphate, and 0.5% Citri-Fi 100M40) coded with one digit random number were evaluated using a 0 to 10 linear scale. The attributes evaluated were: juiciness, gumminess, texture, flavor and color. Table 2.4 shows the rating scale for each attribute. Additionally, panelists were asked to rank each sample in their order of preference from the most to the less liked. The samples (approximately 10 grams) were heated up in a grill to 160 °F. The sensory questionnaire is shown in appendix III. A total of 5 trained panelists took part in the sensory analysis.

Key to sensory rankings

Attribute	Scale
Mouthful: Juiciness,	1 = dry, 10 = juicy
Mouthfeel: Gumminess	1 = gummy 10 = non gummy
Texture:	1=soft, 10=firm
Flavor:	1 = bland, 10 = intense
Color:	1 = light, 10 = dark
Overall preference.	1= most liked, 2=second most liked, 3=less liked

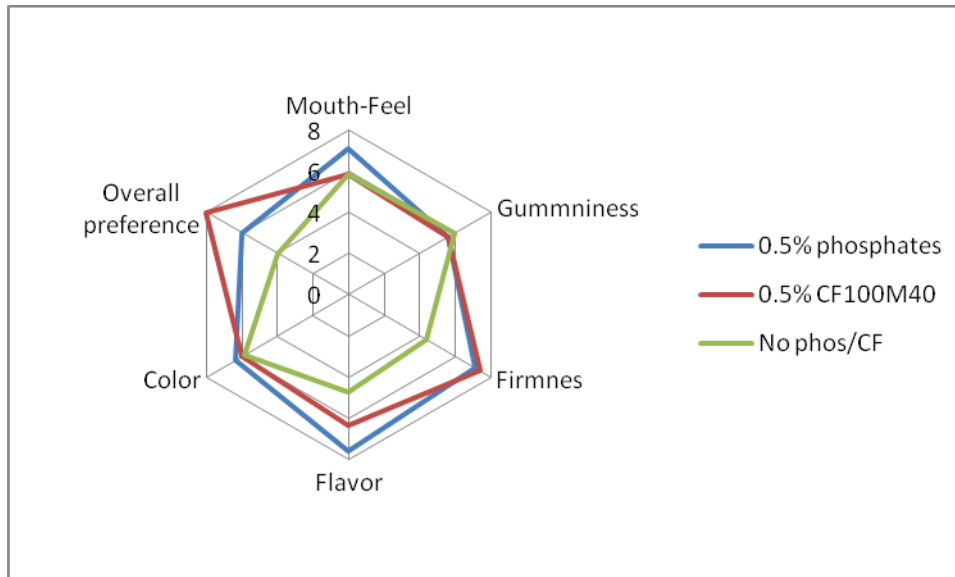
**Table 2.4:** Attributes evaluated and rating scale used.

Table 2.5 includes the overall sensory preference rankings.

Overall Sensory preferences	Test description	Summary of Sensory Comments
1 (most preferred)	0.5% CF100M40	Juicy. No off flavors.
2	0.5% phosphates	Off (salty) flavor. Otherwise juicy
3 (least preferred)	no Citri-Fi and phosphates	No off flavors but dry and less firm.

**Table 2.5:** Overall sensory ranking of the chicken breasts.

A breakdown of the individual parameters used in the sensory scoring is shown in Figure 2.2.



**Figure 2.2:** Individual sensory scoring parameters for the chicken samples in this study.

The scores for the individual characteristics in Figure 2.2 indicate a near identical sensory scoring in gumminess and color among the three products. While the chicken breasts containing 0.5% phosphates scored higher for flavor, the comments concerning overall preference suggested that this was the result of the intense phosphate flavor, which was not perceived as a positive attribute. The chicken breasts containing 0.5% Citri-Fi 100M40 and 0.5% phosphates were significantly firmer than control chicken breasts not containing phosphates or Citri-Fi 100M40.

### **Conclusion:**

This study showed that Citri-Fi can be used to improve yield of a chicken product. Both Citri-Fi and sodium tripolyphosphate resulted in similar yield at a 0.5% level. However, the sensory data suggest that there is a benefit of using Citri-Fi instead of phosphates. A significant yield benefit, nearly 8.6%, can be realized if a manufacturer does not currently use phosphates. Therefore, these results show one example of a suitable application of Citri-Fi in an injected poultry item.

### **III. TURKEY**

An injected turkey product made with Citri-Fi was evaluated for its suitability. In this study, yield and sensory characteristics of the turkey breasts were evaluated when Citri-Fi was used at 0.2% of the post injected weight.

#### **Materials and Methods**

Turkey samples were purchased from a processing plant. Skinless and boneless turkey breasts were injected at 25% of their initial weight with either a control formula or test brine as shown in Table 3.1. Approximately 2.2 lbs of turkey was injected in each test. A stainless steel commercial Waring® kitchen blender was used to mix the brine at high speed for approximately 9 minutes. Turkey was manually injected with a 50 cc syringe with an attached infusion tube. After injection, the turkey samples were vacuum tumbled for 1 hour and held for 24 hours at 35 °F. Subsequently, the turkey breasts were cooked in a Proctor Silex® water bath at 300 °F until the internal temperature reached 160 °F. Table 3.1 below shows the injected ingredients of the control turkey and Test (T1) made with Citri-Fi.

Test	Percent injection	% ingredient in Finished Turkey			
		dextrose	Salt	phosphate	Citri-Fi 100M40
Control	25.00%	1.46%	1.63%	0.48%	0.00%
T1	25.00%	1.46%	1.63%	0.48%	0.20%

**Table 3.1:** Table showing the brine ingredients in the finished turkey post-injection and prior to cooking.

Here is an overview of the overall procedure for making the turkey.

1. Weigh out brine ingredients; place the water in the stainless steel commercial blender.
2. Add the phosphates and mix for 3 minutes or until phosphates are fully dissolved in the water.
3. Add the remaining brine ingredients and mix vigorously for another 5-8 minutes.
4. Weigh out approximately 2.2 lbs of turkey and inject it at the desired percentage injection rate based on the weight of the turkey. Inject the brine as uniformly as possible through out the turkey breast.
5. Place the turkey in a tumbler and tumble for 1 hour and hold overnight at 35 °F for approximately 24 hours. Purge was calculated as follow:

$$\text{Purge} = \frac{(\text{Post injected turkey weight} - \text{Post injected turkey weight at 24 hours})}{\text{Post injected turkey weight}} * 100\%$$

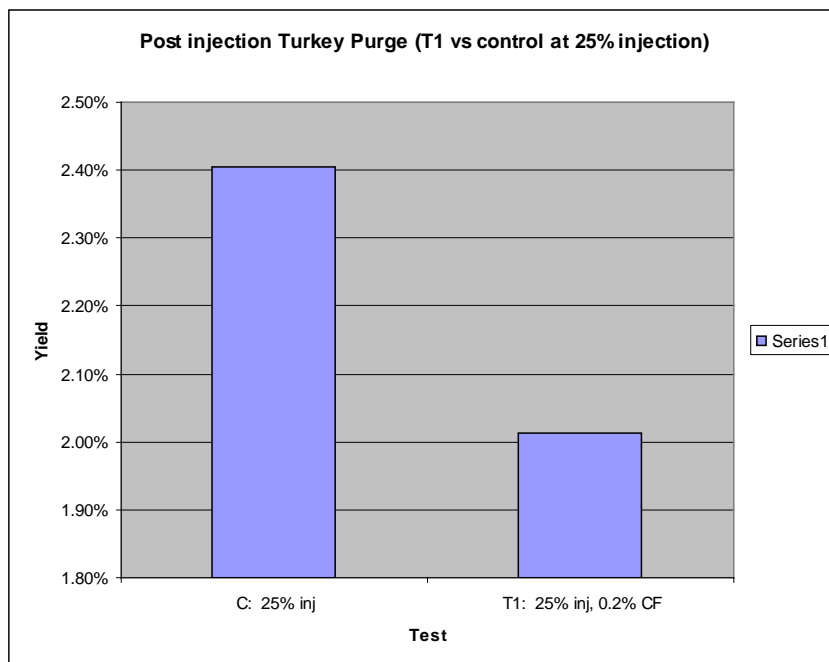
6. After the 24 hour period, the turkey was placed in vacuum sealed bags and then water cooked at 300°F until internal temperature reached 160°F. This took approximately 2-3 hours.
7. Cool the turkey in ice and then take the finished cooked weight to determine the cooked yield. Yield was calculated as shown in formula below:

$$\text{Yield} = \frac{\text{Post cooked turkey weight}}{\text{post injected turkey weight}}$$

Both the purge and the yields of the turkey were measured in addition to conducting a sensory panel evaluation.

## Results

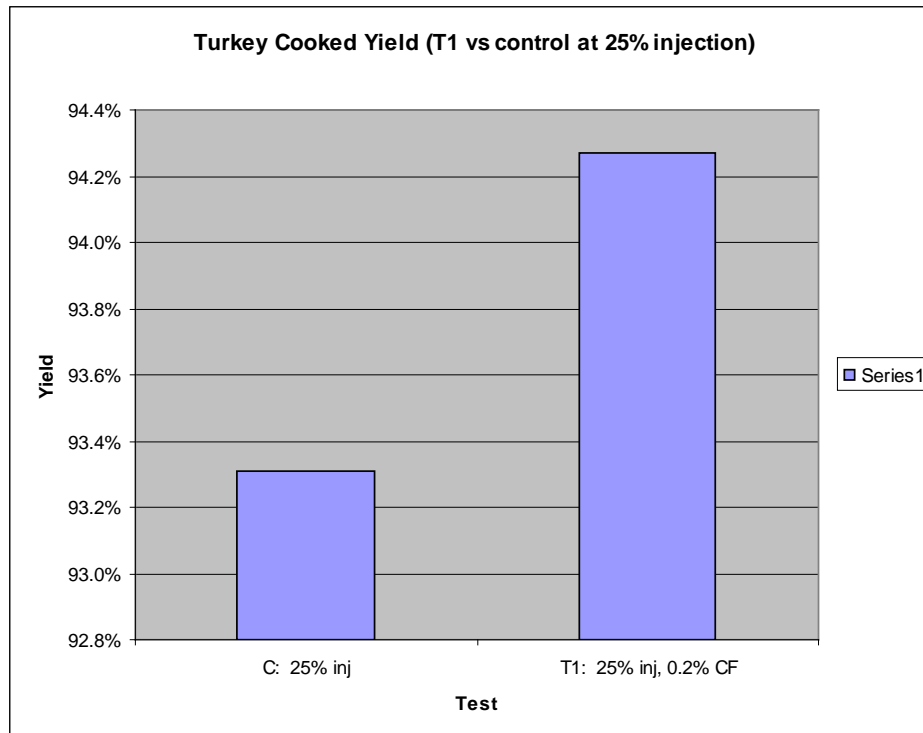
The purge results are shown in Figure 3.1. The purge results show that there was a 2.4% purge loss in the control turkey, and 2% purge in the turkey treated with 0.2 % Citri-Fi.



**Figure 3.1:** Turkey purge data measured after 24 hours post injection.

Figure 3.2 includes the cooked yield data. The cooked yield of control was 93.31% whereas cooked yield of Citri-Fi treated turkey was 94.27%. Consequently, adding 0.2% Citri-Fi resulted in increased the cooked yield.





**Figure 3.2:** Cooked yield data for the control and test turkeys used in this test.

### Sensory Evaluation

A quantitative descriptive analysis was used to evaluate the key attributes of control and test injected turkey breasts. The attributes evaluated were: mouth-feel, gumminess, texture, flavor, and color on a 1 to 10 intensity scale. Panelists were also asked to rank the samples in order of preference from the most liked to the less liked. Table 3.2 shows the characteristics evaluated for each attribute and the rating key used. Samples were cook to internal temperature of 160 °F and provided to panelists along with enough water to rinse their mouth and questionnaire (see Appendix IV). A total of 6 trained panelists took part on the study.

#### Key to sensory rankings

Attribute		Scale	
Mouthfeel:	Juiciness,	1 = dry,	10 = juicy
Mouthfeel:	Gumminess	1 = gummy	10 = non gummy
	Texture:	1=soft,	10=firm
	Flavor:	1 = bland,	10 = intense
	Color:	1 = light,	10 = dark
	Overall preference.	1= most liked, 2=less liked,	

**Table 3.2:** Attributes evaluated and rating scale used.

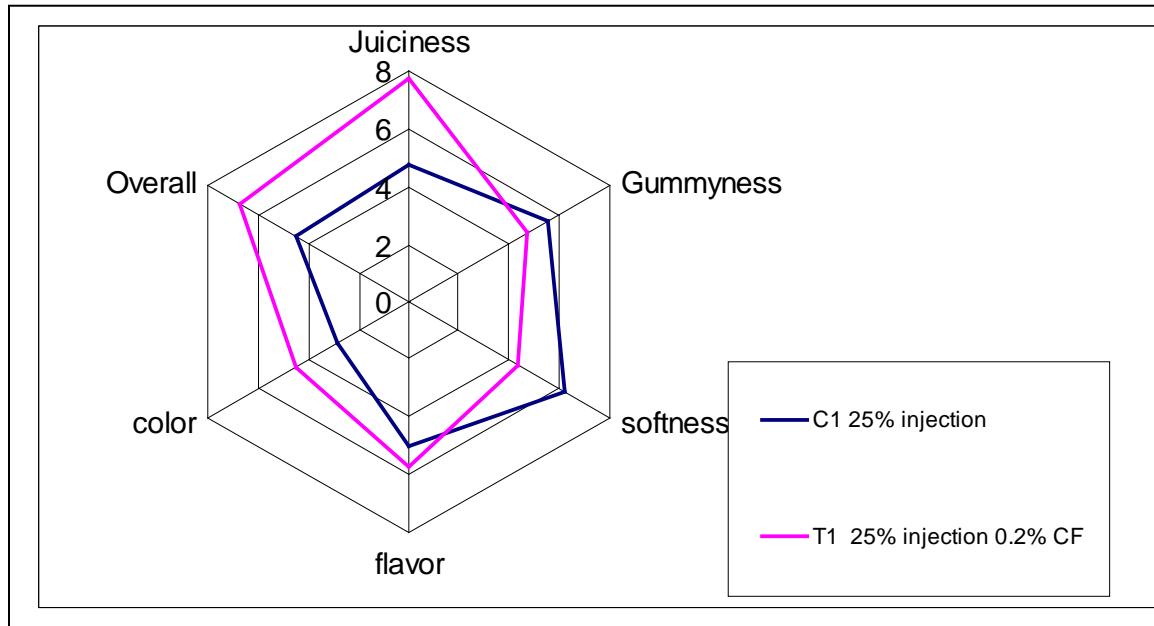
## Results

The overall sensory preference scorings of the turkey breasts made in this test are shown in Table 3.3. As the results show, the turkey breast with Citri-Fi (T1) was preferred in terms of its overall sensory characteristics.

Overall Sensory preferences	Test description
1 (most preferred)	0.2% CF100M40
2	Control, no Citri-Fi

**Table 3.3:** Overall sensory ranking of the turkey breasts made with Citri-Fi 100M40

Several other sensory characteristics were evaluated and the results for these are shown in Figure 3.3.



**Figure 3.3:** Sensory data for the finished control and test turkey made in this study.

For the individual sensory characteristics, the turkey breasts were evaluated for perceived level of softness, gummyiness, juiciness, color and flavor. As we can conclude from the figure above, Test 1 (Citri-Fi treatment) was perceived as being significantly juicier and firmer than control, which is favorable in a turkey product. Furthermore, Test 1 was evaluated as slightly less gummy and more flavorful than control.

**Conclusion:**

This study showed that 0.2% Citri-Fi improves both yield and sensory characteristics of turkey and therefore is a suitable application.

#### **IV. PORK PRODUCTS**

Tests were conducted using Citri-Fi 100M40 (dried orange pulp) in a reconstituted pork product. Additionally, this study evaluated using various levels of Citri-Fi in the finished product along with higher levels of injection to see if the Citri-Fi improves overall yields while maintaining sensory characteristics.

#### **Materials and Methods**

1. Brine ingredients were weighed out and added to the water that was being mixed with a lightning mixer and a five gallon pail. The brine was mixed 3-5 minutes.
2. The pork was weighed out and brine was injected at the various injection percentages as stated in the test descriptions. The injection levels of 33%, 40% and 49% were tested. 10 lbs of reconstituted pork product were injected.
3. The reconstituted pork product was then ground through a kidney shaped end attachment on a Hobart grinder. A photo of the grinder is shown in Appendix II. The reconstituted pork pieces that made up the 10 lb batch size were approximately 200-300 g in size.
4. The reconstituted pork product was then allowed to rest for 18-24 hours and then tumbled for 1 hour the following day. Following tumbling, the pork was stuffed in approximately 5 lb increments in casings that were approximately 5" diameter. These were then weighed to record the precooked weight.
5. The reconstituted pork product was then cooked in a smokehouse to 158 °F. The total cooking time was approximately 6 hours. The post cooked weight was then measured and cooked yield determined.

The overall yield and cooked yield were calculated as shown in formulas below:

Overall yield=  $\frac{\text{Post cooked meat weight}}{\text{Pre injected meat weight}}$

Cooked yield=  $\frac{\text{Post cooked meat weight}}{\text{Post injected meat weight}}$

The table below (Table 4.1) shows the ingredients and injection rates for the various tests that were conducted. The percentages shown are the net ingredients that would be in the pork after injection.

<b>Test</b>	<b>Percent injection</b>	<b>Cure (6.25% nitrite)</b>	<b>Sodium erythorbate</b>	<b>Citri-Fi 100M40</b>	<b>salt</b>	<b>sugar</b>
control	33%	0.210%	0.166%	0.00%	2.09%	0.45%
T1	49%	0.210%	0.166%	0.93%	2.09%	0.45%
T2	40%	0.210%	0.166%	0.50%	2.09%	0.45%
T3	33%	0.210%	0.166%	0.30%	2.09%	0.45%

**Table 4.1:** Ingredients in the pork after injection.

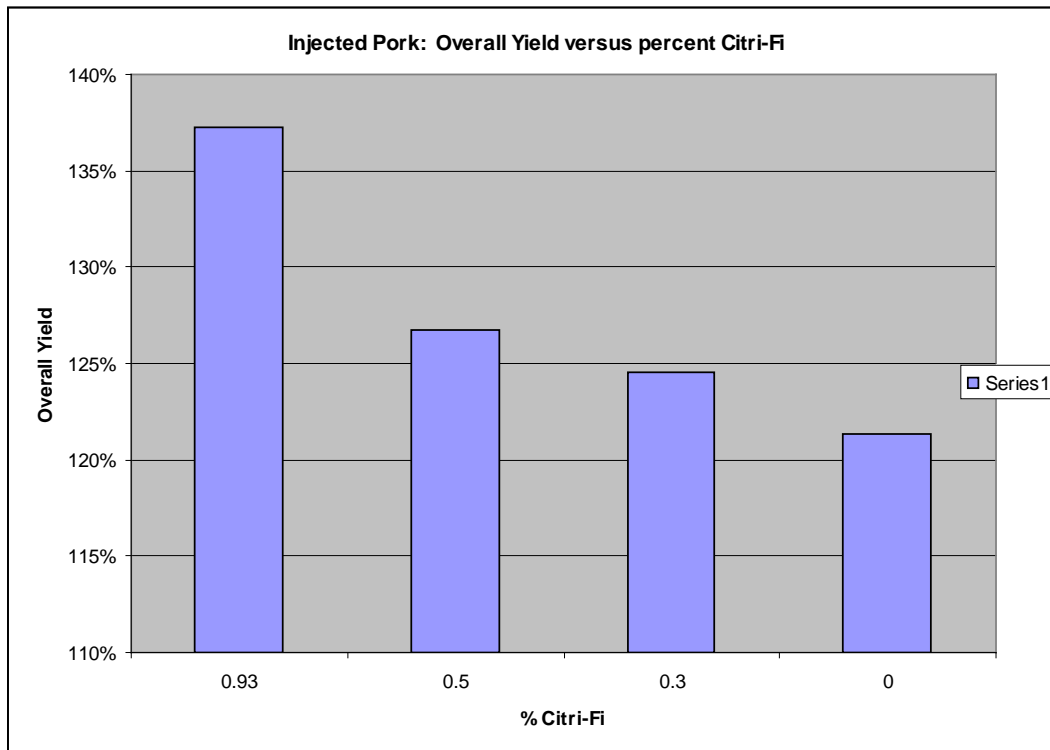
## Results

The sensory, yield numbers and finished cooked costs of the pork are shown in Table 4.3 and Table 4.4. The overall yield results are included in Figure 4.1. Increasing levels of Citri-Fi resulted in increased overall yields.

Yield Data					
Test#	% CF	pre inject wt	injection wt	cooked Yd	post finished wt
T1	0.93	100	149	92.1%	137.3
T2	0.5	100	140	90.5%	126.7
T3	0.3	100	133	93.6%	124.5
Control	0	100	133	91.2%	121.3

**Table 4.3:** Ingredients in the pork after injection.

The highest overall yield was obtained using 0.93% Citri-Fi and a 49% injection level. Meanwhile, when the same injection was used as the control at 33%, the overall was increased from 121.3% in the control to 124.5% in the test containing 0.3% Citri-Fi.



**Figure 4.1:** Overall yield of an injected pork product versus percent Citri-Fi.

The sensory analysis was conducted by scoring the sensory of taste, texture, appearance, and moistness of the Citri-Fi treated product as better, equal, or worse than to the control. In other words, the sensory results compare the control to the other tests by giving the treatment a sensory score of:

- a. “0” if the rating was similar or identical to the control
- b. “+” if the sensory was improved compared to the control
- c. “-“ if the sensory was less favorable compared to the control.

<b>Sensory</b>					
<b>Test#</b>	<b>% CF</b>	<b>taste</b>	<b>texture</b>	<b>moistness</b>	<b>appearance / color</b>
T1	0.93	0	-	0	+
T2	0.5	0	0	0	0
T3	0.3	+	+	+	0
Control	0	0	0	0	0

**Table 4.4:** Sensory results of the reconstituted pork made from the various tests.

These sensory results show that the using the Citri-Fi at a lower level and with the same injection rate as the control, i.e. 0.3% Citri-Fi at 33% injection improved the sensory score of the finished product. Increased levels of injection resulted in increased overall yield while maintaining the sensory quality of the control.

### **Conclusions**

The findings of this study support suitability of Citri-Fi® in injected pork products. The benefits are due to the Citri-Fi’s high water binding capacity and increased yields. No off flavors or reduction in sensory were detected in terms of taste, texture, or moistness compared to a control. The sensory and yield data suggests a yield benefit can be realized using various levels of Citri-Fi in the finished product. Additional overall yield benefits were seen when extra brine was injected while maintaining the sensory compared to the control.

## **V. SUMMARY**

This report documents findings when Citri-Fi products were used in injected poultry and meat products. The results indicate that favorable yield and sensory results may be obtained with Citri-Fi at various levels. Fiberstar's no objection GRAS letter from FDA supports that Citri-Fi products are safe to use up to 3.5%. As shown in these studies, 3.5% is more than sufficient for an injected meat or poultry product. In all these studies, the Citri-Fi was included in the brine that was injected into the muscle.

Data in this report demonstrates the suitability of Citri-Fi in injected poultry and meat products. Citri-Fi products can be used to reduce purge and retain brine in the injected products prior to cooking and increase cooked and overall yields.

**APPENDIX I-** The photos below show the pilot scale injector used in the chicken injection and pork testing.



**Figure A.1:** Photos of the pilot scale injector used in this testing.



**APPENDIX II: Equipment used in reconstituted pork testing.**



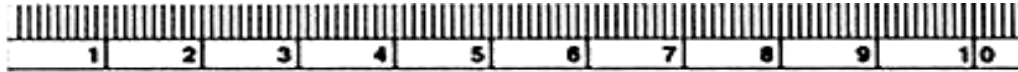
**Figure A.2:** Photo of the kidney shaped attachment on the meat grinder used in making the injected pork product.

### APPENDIX III. Sensory sheet used for the evaluation of injected chicken.

#### Sensory Attributes of **Injected Chicken**

Please clearly mark on the scale using a solid vertical line where each sample falls as far as mouth-feel, texture, flavor and color (1-10). Label each sample as 1, 2, 3. Use water provided to cleanse pallet between evaluating each sample.

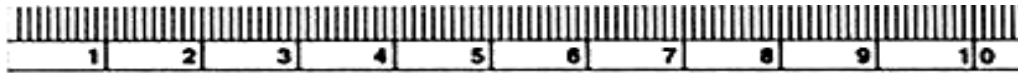
##### **Mouth-feel:**



Dry

Juicy

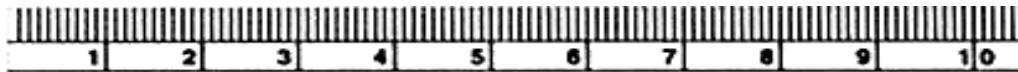
\*Juiciness is determined by the amount of moisture released from product after 7-8 chews.



Gummy

Non-gummy

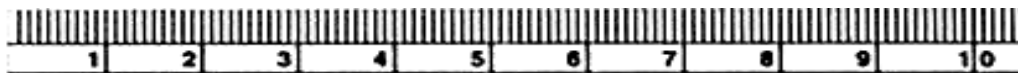
##### **Texture:**



Soft

Firm

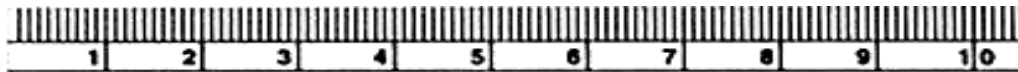
##### **Flavor:**



Bland

Intense

##### **Color:**



Light

Dark

**Overall preference.** Please rank the samples from the most liked (#1) to the less liked (#3)

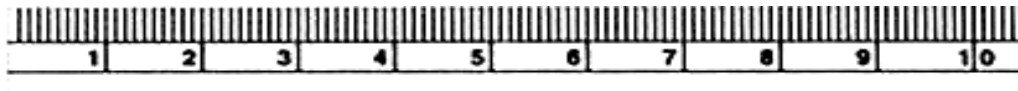
1    2-    3-

#### APPENDIX IV . Questionnaire used in the sensory evaluation of turkey breasts.

##### Sensory Attributes of **Turkey Breasts**

Please clearly mark on the scale using a solid vertical line where each sample falls as far as mouth-feel, texture, flavor and color (1-10). Label each sample as 1, 2, 3. Use water provided to cleanse pallet between evaluating each sample.

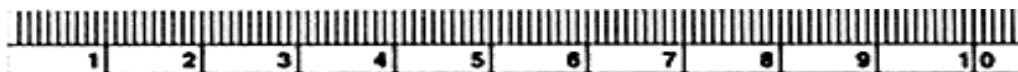
##### **Mouth-feel:**



Dry

Juicy

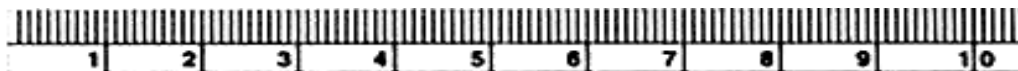
\*Juiciness is determined by the amount of moisture released from product after 7-8 chews.



Gummy

Non-gummy

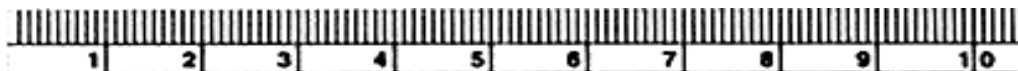
##### **Texture:**



Soft

Firm

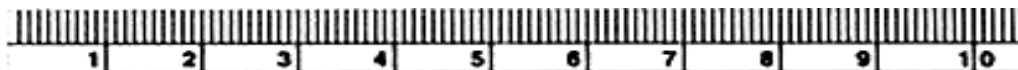
##### **Flavor:**



Bland

Intense

##### **Color:**



Light

Dark

**Overall preference.** Please rank the samples from the most liked (#1) to the less liked (#2)

1- 2-

## **Using Citri-Fi® products as a binder in liquid, frozen, and dried whole eggs**

by

Brock Lundberg, Ph.D.

August 27, 2013

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## Introduction

Fiberstar Inc.'s (Fiberstar's) Citri-Fi® products, consisting of dried orange pulp or citrus flour, have been shown to provide benefits in a wide variety of products for their binding, emulsification, and stabilizing properties. For example, the Citri-Fi (or CF) products are used in cake products to bind water and keep cakes moist. In meat products, CF binds both water and fat to improve yields while maintaining and/or improving texture. CF products are presently on FSIS's Safe and Suitable list for use as a binder in ground and whole muscle meat and poultry products where allowed by the standard of identity for such products.

The raw material for Citri-Fi has been identified as dried orange pulp since the issuance of GRN 000154. However, a revision to the company's GRAS notification is in the process of being finalized to include other fibrous parts of citrus, e.g. peel, segment membranes, etc. The properties for these new products match those for the dried orange pulp.

Fiberstar wishes to pursue having Citri-Fi products be included on FSIS's Safe and Suitable list for use in liquid, frozen, and dried whole egg products. Fiberstar has been working with an egg producer to make products that contain a combination of Citri-Fi products and whole eggs. Studies have already been conducted showing that combining Citri-Fi products and whole eggs together results in quality finished bakery products, such as cake. Citri-Fi products are presently used in baked products such as cake, and whole eggs are added separately as an ingredient to make a finished product. In this new product we are pursuing, Citri-Fi would be added directly to the whole eggs so that the baker would not need to add the Citri-Fi and whole eggs separately as they would be combined by egg processors. The use and benefit of Citri-Fi would be in multiple egg based products, including whole eggs, egg whites, and egg yolks. In the formulas outlined below, the amount of Citri-Fi and water added to the egg product was based on the amount that would typically be added to a baked product that would contain Citri-Fi, water, and eggs as added ingredients.

## Objective

The objective of this project is to show the benefits of adding CF to whole egg products for its binding and

## Procedures

### 1) *Liquid Whole Eggs*

The Citri-Fi and whole egg blend samples will be processed in Michael Foods (MFI) R&D pilot plant using continuous commercial production lines. Mixing procedures, handling and pasteurization operations as well as the following cooling and packaging unit operations all are compliant to MFI standard operation procedures and USDA guidelines. The pasteurized (>141°F and >3.5min) and cooled (to less than 40°F) liquid blends will be packaged into 10-lbs aluminum Scholle bags.

Both standard shelf life (SSL; typical shelf life 4 weeks) and extended shelf life (ESL; typical shelf life 12 weeks) whole egg blends will be made and packaged. Total plate count, major pathogens including *Salmonella*, *Listeria monocytogenes*, *E. Coli* 0157H7., pH, and sensory properties (viscosity, color) will be measured when the product is first made and at the end of the typical shelf life, i.e., 4 weeks for SSL and 12 weeks for ESL.



The functional property that will be tested is whip/foam stability. Below is the procedure for the whipping test:

Whipping Test Procedure

1. A 400mL solution is required for the whip testing. For the test formulas, slowly mix in Citri-Fi (the amount is listed in formulation tables below) using an overhead stirrer (IKA RW 20) with a four-bladed propeller.
2. Pour the solution in a Hobart mixer (Model A-200).
3. Attach wire whip and mix on speed "3" for 5 minutes.
4. Remove bowl and measure density using a 100 mL graduated cylinder.
5. Record weight/volume and repeat the test after one hour. Note that if the foam is not stable over time, a layer of liquid will begin to form at the bottom of the graduated cylinder. The mL's of liquid versus foam will then be measured. For measuring the one hour density, if a liquid layer has formed subtract that amount from the original volume measured to compare the change in density over time.

Here are the liquid whole egg formulas that will be tested:

Ingredient	Control (%)	Test A (%)	Test B (%)
Plain liquid egg	100	95	75
Water	X	X	18.64
Citri-Fi 200 FG	X	X	1.36
Sugar (granulated)	X	5	5
Total	100%	100%	100%

2) *Frozen Eggs*

Frozen whole eggs will be prepared using the same process outlined above for the liquid whole eggs with the difference that they will be frozen after processing. Similar to the liquid whole egg testing, the functional property that will be tested in the frozen liquid whole egg is whip/foam stability. See *Whipping Test Procedure* Liquid egg samples will be prepared, frozen for two days at 9 °F, and then thawed to room temperature prior to the whipping evaluation.

Here are the frozen liquid whole egg formulas that will be tested:



Ingredient	Test A (%)	Test B (%)	Test C (%)
Plain liquid whole egg	95	75	80
Water	X	18.64	18.25
Citri-Fi 100 FG	X	X	1.77
Citri-Fi 200 FG	X	1.36	X
Sugar (granulated)	5	5	X
Total	100%	100%	100%

### 3) Dried Whole Eggs

Dried whole egg has functional benefits, such as aerating, leavening, binding, and emulsifying. However, it is common knowledge that dried whole eggs are susceptible to some heat damage during drying. As the product is dried to the typical levels of 3-4% moisture, the amount of heat the product absorbs becomes more important. Typically sugar is added to reduce heat damage. The ingredient, i.e., Citri-Fi®, added to whole egg prior to drying can act as a form of protection to the egg product during drying. In this test the amount of sugar co-dried with the whole egg samples will be 25% (dry weight basis). It is anticipated that the Citri-Fi can either by itself or in conjunction with added sugar have similar protection capability in maintaining the natural functional properties of the whole egg.

To test this concept, a formulation consisting of whole eggs both with and without Citri-Fi will be dried and resultant product tested. The dried whole egg will be hydrated at 1:3 (dried whole egg: water). Again, the functional property that will be tested in the dried whole egg is whip/foam stability. Once the dried whole eggs are hydrated, the same *Whipping Test Procedure* will be used.

Here are the dried whole egg formulas that will be tested:

Ingredient	Control (%)	Test A (%)	Test B (%)	Test C (%)
Dried whole egg	X	X	20	5
Dried whole egg co-processed with Citri-Fi 200FG	X	25	X	X
Whole dried egg co-dried with sugar (25%)	25	X	X	20
Water	75	75	60	75
Additional water	X	X	18.64	X
Citri-Fi 200 FG	X	X	1.36	X
Sugar (granulated)	X	X	X	5
Total	100%	100%	100%	100%

## Results

### A.) Liquid Eggs:

Significant foam settling separation was seen in the Control (plain liquid egg) and Test A (plain liquid egg with 5% sugar) one hour after the whipping test was performed (Table 1). Comparatively, Test B (plain liquid egg with CF 200FG and 5% sugar) maintained stability after one hour, and also had a lower initial density. The separation seen with the Test A formula is shown in Figure 1.

*Table 1- Liquid Egg Testing Results*

Ingredient	Control (%)	Test A (%)	Test B (%)
Plain liquid egg	100	95	75
Water	X	X	18.64
CF 200 FG	X	X	1.36
Sugar (granulated)	X	5	5
Total	100%	100%	100%
Initial Density (g/mL)	0.279	0.294	0.245
1 hr Density (g/mL)	0.39	0.354	0.245
Observations	Settling of foam at 26 mL	Settling of foam at 17 mL	No change



*Figure 1 – Test A after 1 hour*



### B.) Frozen Eggs:

In the frozen eggs, foam settling was seen in Test A (frozen plain liquid egg with 5% sugar), while Test B (frozen plain liquid egg with CF 200FG and 5% sugar), and Test C (frozen plain liquid egg with CF 100FG) maintained a stable foam over time (Table 2). Initial density values were comparable between all three variables.

*Table 2- Frozen Liquid Egg Testing Results*

Ingredient	Test A (%)	Test B (%)	Test C (%)
Plain liquid egg	95	75	80
Liquid egg co-processed with CF 200FG	X	X	X
Water	X	18.64	18.25
CF 100 FG	X	X	1.77
CF 200 FG	X	1.36	X
Sugar (granulated)	5	5	X
Total	100%	100%	100%
Initial Density (g/mL)	0.327	0.334	0.34
1 hr Density (g/mL)	0.344	0.334	0.34
Observations	Settling of foam at 5 mL	No change	No Change

\*no images available for frozen liquid egg whipping test

### C.) Dried Eggs:

In dried eggs, significant foam settling was seen in the Test C (plain dried egg with whole dried egg co-dried with sugar, plus 5% sugar) and the Control (whole dried egg co-dried with sugar). Minimal settling to no settling was seen in Test A (dried egg co-processed with CF 200FG) and Test B (dried plan egg with CF 200FG), which is also shown in Figure 2. The densities of the dried egg variables without the addition of CF 200FG had significant foam separation and an increase in density over time. In Test C (plain dried egg with whole dried egg co-dried with sugar, plus 5% sugar), the density nearly tripled after one hour.

*Table 3- Dried Egg Testing Results*

Ingredient	Control (%)	Test A (%)	Test B (%)	Test C (%)
Dried plain egg	X	X	20	5
Dried egg co-processed with CF 200FG	X	25	X	X
Whole dried egg co-dried with sugar (25%)	25	X	X	20
Water	75	75	60	75
Add'l water	X	X	18.64	X
CF 100 FG	X	X	X	X
CF 200 FG	X	X	1.36	X
Sugar (granulated)	X	X	X	5
Total	100%	100%	100%	100%
Initial Density (g/mL)	0.361	0.385	0.663	0.47
1 hr Density (g/mL)	0.516	0.405	0.663	1.175
Observations	Settling of foam at 30 mL	Settling of foam at 5 mL	No change	Settling of foam at 40 mL

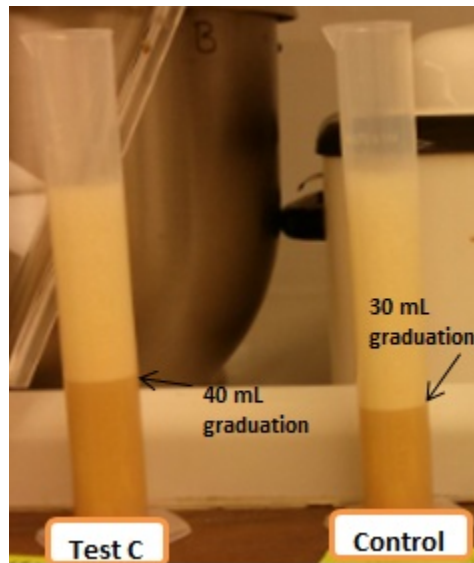


Figure 2 –Test C and Control after 1 hour

#### D. Shelf life evaluation:

The ESL and SSL Citri-Fi and whole egg blend samples were processed using continuous commercial production lines. Mixing procedures, handling and pasteurization operations as well as the following cooling and packaging unit operations all are compliant with USDA guidelines.

The pasteurized (>141°F and >3.5min) and cooled (to less than 40°F) liquid blends were packaged into 10-lbs aluminum Scholle bags. The packaged samples were stored in a dedicated R&D refrigerator at 33~40°F and tested periodically at a designed interval for microbiological (TPC, *Coliform*, *Salmonella*, *E. coli*, *Listeria*), physical (color, viscosity), sensory (appearance, consistency), chemical (pH) and functional properties (layer cake applications).

The results suggested that both the ESL and the SSL liquid Citri-Fi and whole egg blends can successfully achieve the designed shelf life with minimal microbial safety challenge and quality alteration. The interactions between Citri-Fi and egg components during storage are minimal and resultant changes in egg safety and functionality is not significant. The property tested on day-1 samples in comparison with that on the 12-week for ESL and that on 4-week for SSL are summarized in Table 1 below. The cake function for the egg samples both in the beginning and at the end of their shelf life were good.

Table 1. Comparison between samples at day-1 and at end of shelf life

Test dates	ESL blend							SSL Blend						
	TPC* cfu/ml	pH	Vis (cP)	Cake** function	Color			TPC* cfu/ml	pH	Vis (cP)	Cake** function	Color		
					L	a	b					L	a	b
Day-1	<10	6.9	1080	good	71	14	46	<10	6.9	333	good	68	16	53
4-wk								<10	6.9	267	good	67	16	50
12-wk	<10	6.8	1780	good	71	13	45							



TPC\*--all samples were tested for major pathogens including *Salmonella*, *Listeria*, *E. Coli* *O157:H7* and found negative both at the beginning and at the end of the shelf life tested. Therefore, no pathogen test results reported in this table and only TPC reported herein.

#### **Conclusions:**

In liquid eggs, adding CF 200FG and 5% sugar improves foam stability in liquid whole egg over time as a result of the emulsification properties in the citrus fiber. The whipping/aeration properties of the liquid egg are also improved, which suggests more air is incorporated into the foam, thus resulting in a lower density and a stable foam.

In frozen eggs, adding CF 200FG and 5% sugar or adding CF 100FG improve foam stability in frozen whole egg over time as a result of the emulsification properties in the citrus fiber. Although the densities are comparable between all three variables immediately after the whipping test, the addition of the Citri-Fi products maintains the density over time.

In dried eggs, adding CF 200FG to dried plain egg or co-processing liquid egg with CF 200FG improve foam stability in dried whole egg over time as a result of the emulsification properties in the citrus fiber. Without the addition of CF 200 FG (either co-processed with egg prior to drying, or added to dried egg directly) less air is incorporated into the foam, thus resulting in an unstable foam, and an increasing density over time.

The shelf-life of the liquid egg blends made with Citri-Fi is similar to the control liquid egg products. Microbiological testing indicated the product held up well throughout the shelf life and the viscosity and appearance also minimally changed.

SUBMISSION END